

Corrections des exercices du cours 7

Variables, tableaux, fonctions et mémoire

Exercise

```
int a = 2, b = 5;
```

```
int * p;
```

```
p = &a;
```

```
cout << a << " " << *p << endl;
```

```
a = a + 1;
```

```
cout << a << " " << *p << endl;
```

```
*p = b;
```

```
cout << a << " " << *p << endl;
```

```
b = b + 1;
```

```
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;
```

```
int * p;
```

```
p = &a;
```

```
cout << a << " " << *p << endl;
```

2 2

```
a = a + 1;
```

```
cout << a << " " << *p << endl;
```

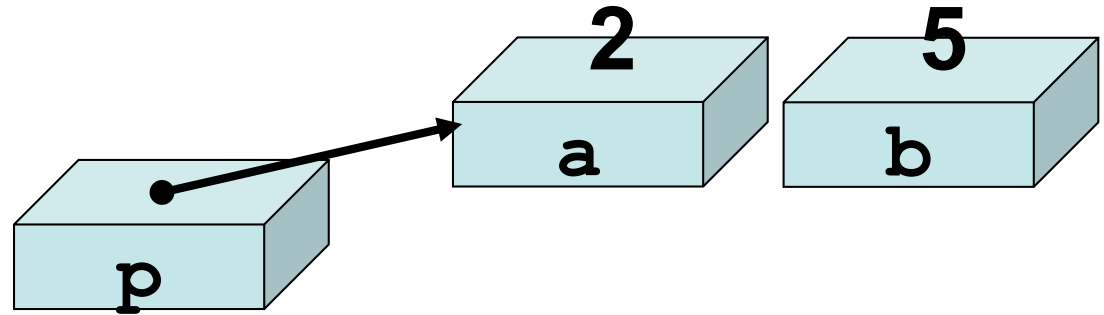
```
*p = b;
```

```
cout << a << " " << *p << endl;
```

```
b = b + 1;
```

```
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



```
p = &a;  
cout << a << " " << *p << endl;
```

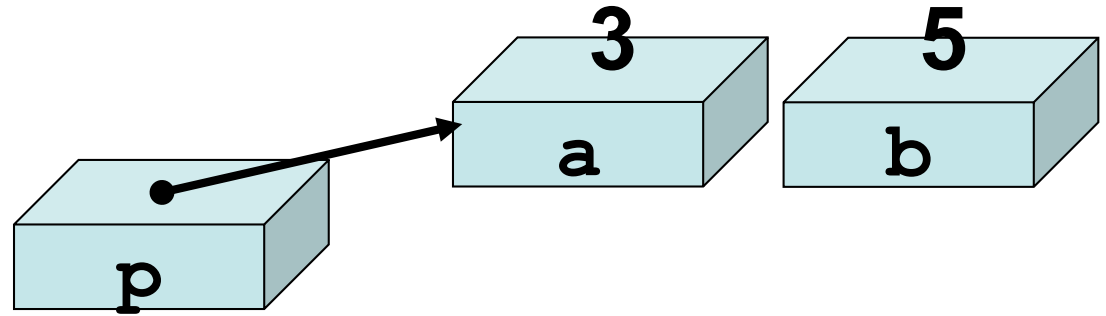
```
2 2
```

```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
*p = b;  
cout << a << " " << *p << endl;
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



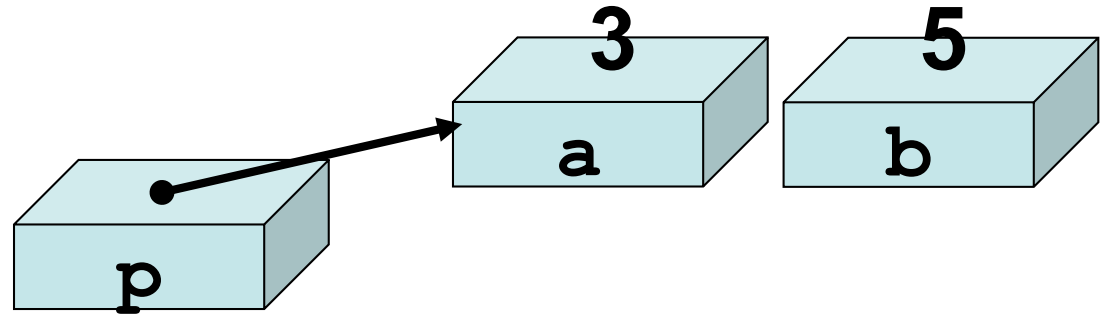
```
p = &a;  
cout << a << " " << *p << endl;
```

```
→ a = a + 1;  
cout << a << " " << *p << endl;
```

```
*p = b;  
cout << a << " " << *p << endl;
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



```
p = &a;  
cout << a << " " << *p << endl;
```

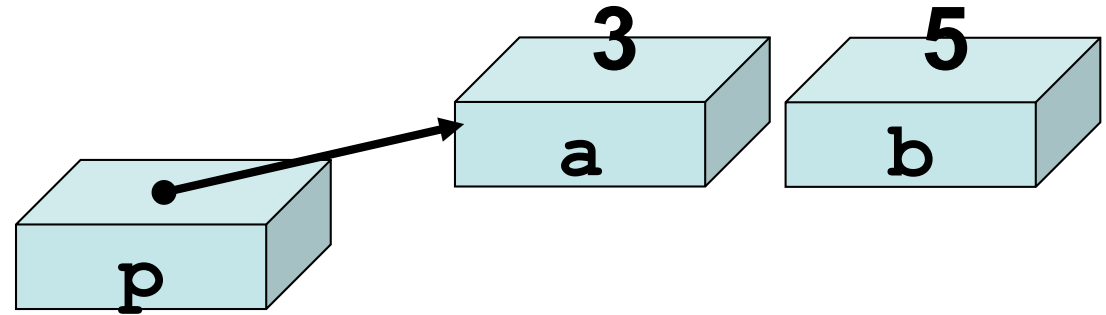
```
a = a + 1;  
→ cout << a << " " << *p << endl;
```

```
3 3
```

```
*p = b;  
cout << a << " " << *p << endl;
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



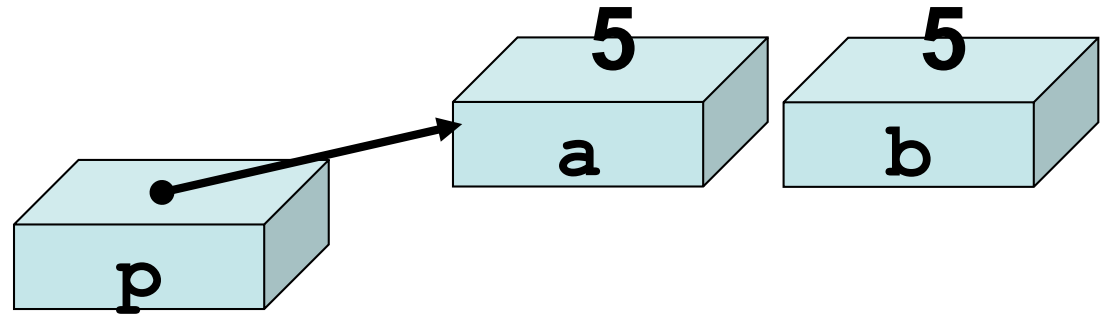
```
p = &a;  
cout << a << " " << *p << endl;
```

```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
→ *p = b;  
cout << a << " " << *p << endl;
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



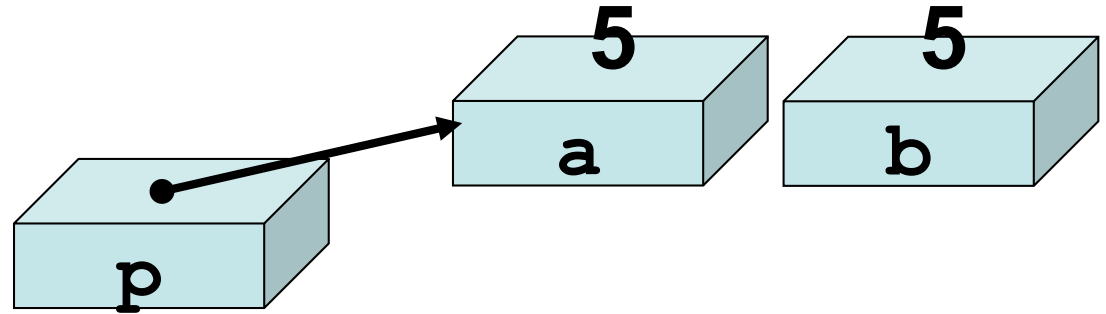
```
p = &a;  
cout << a << " " << *p << endl;
```

```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
→ *p = b;  
cout << a << " " << *p << endl;
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



```
p = &a;  
cout << a << " " << *p << endl;
```

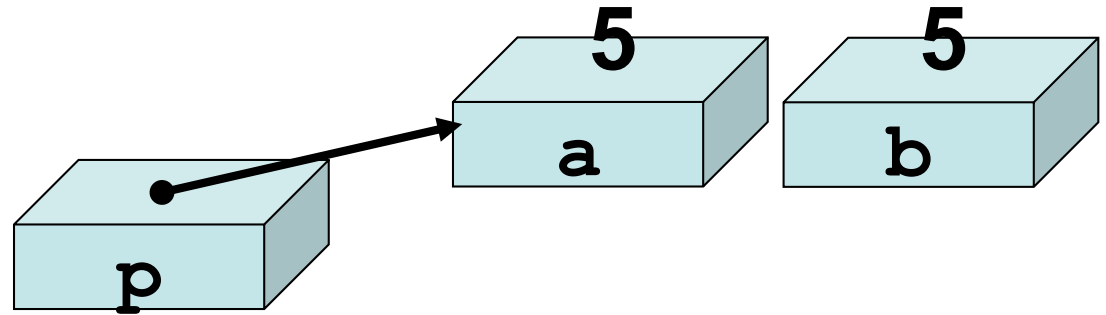
```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
*p = b;  
→ cout << a << " " << *p << endl;
```

```
5 5
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



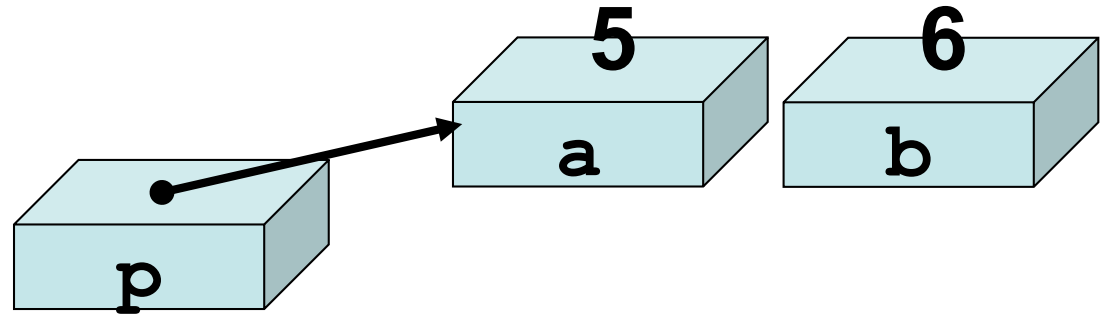
```
p = &a;  
cout << a << " " << *p << endl;
```

```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
*p = b;  
cout << a << " " << *p << endl;
```

```
→ b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



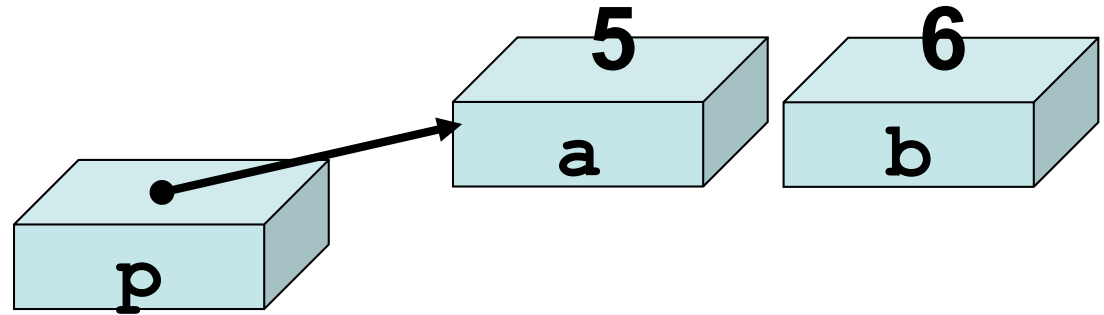
```
p = &a;  
cout << a << " " << *p << endl;
```

```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
*p = b;  
cout << a << " " << *p << endl;
```

```
→ b = b + 1;  
cout << a << " " << *p << endl;
```

```
int a = 2, b = 5;  
int * p;
```



```
p = &a;  
cout << a << " " << *p << endl;
```

```
a = a + 1;  
cout << a << " " << *p << endl;
```

```
*p = b;  
cout << a << " " << *p << endl;
```

```
b = b + 1;  
cout << a << " " << *p << endl;
```



```
5 5
```

Exercise

```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    q = r;
}

...
int a = 1, b = 2;
f(&a, &b);
cout << a << " " << b << endl;
```

```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    q = r;
}

...
int a = 1, b = 2;
f(&a, &b);
cout << a << " " << b << endl;
```

1 2

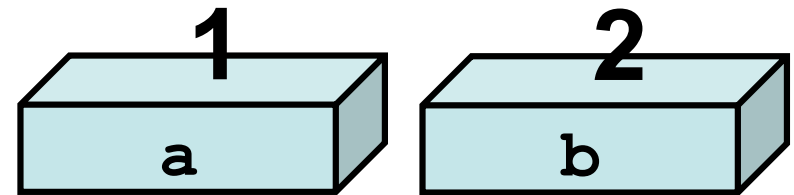
```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    q = r;
}
```

...

```
int a = 1, b = 2;
```

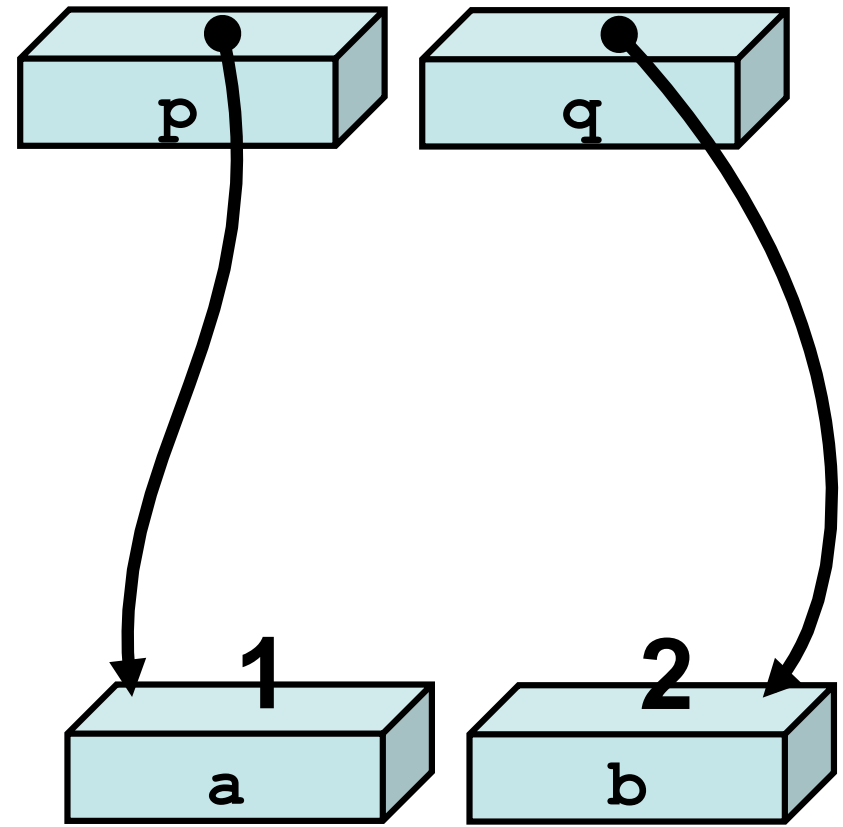
```
→ f(&a, &b);
```

```
cout << a << " " << b << endl;
```



```
→ void f(int * p, int * q)
{
    int * r = p;
    p = q;
    q = r;
}

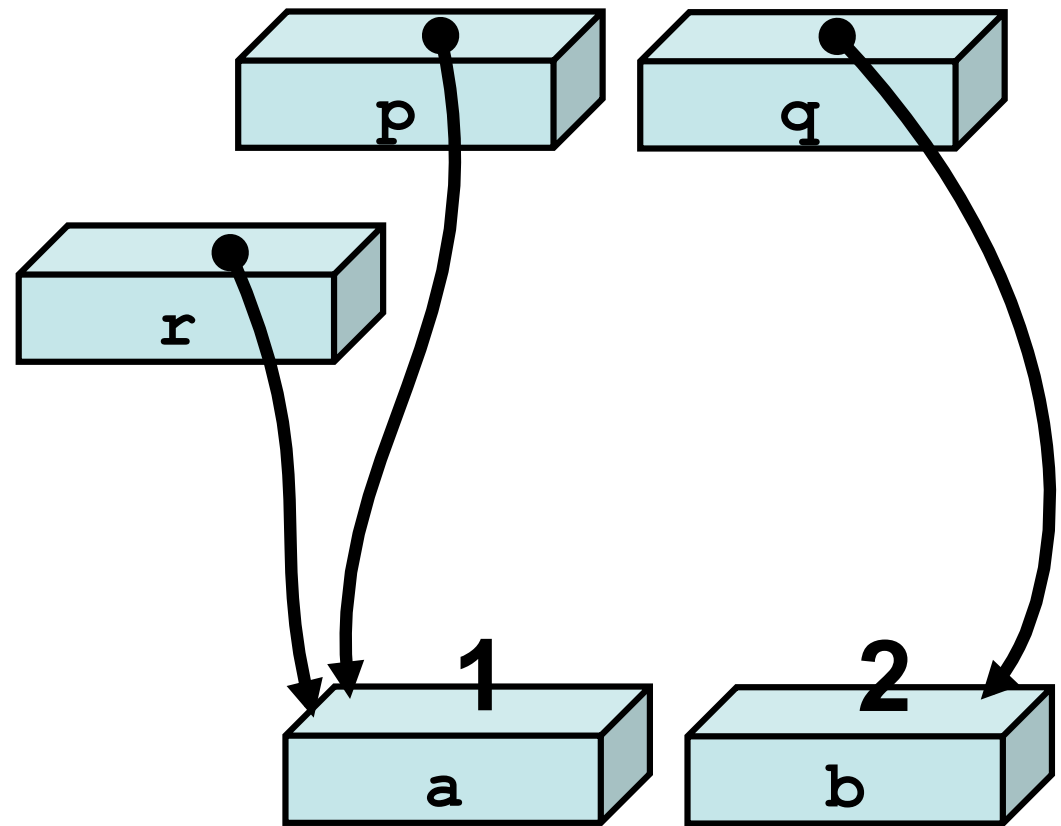
...
int a = 1, b = 2;
→ f(&a, &b);
cout << a << " " << b << endl;
```



```
void f(int * p, int * q)
{
  int * r = p;
  p = q;
  q = r;
}
```



```
...
int a = 1, b = 2;
f(&a, &b);
cout << a << " " << b << endl;
```



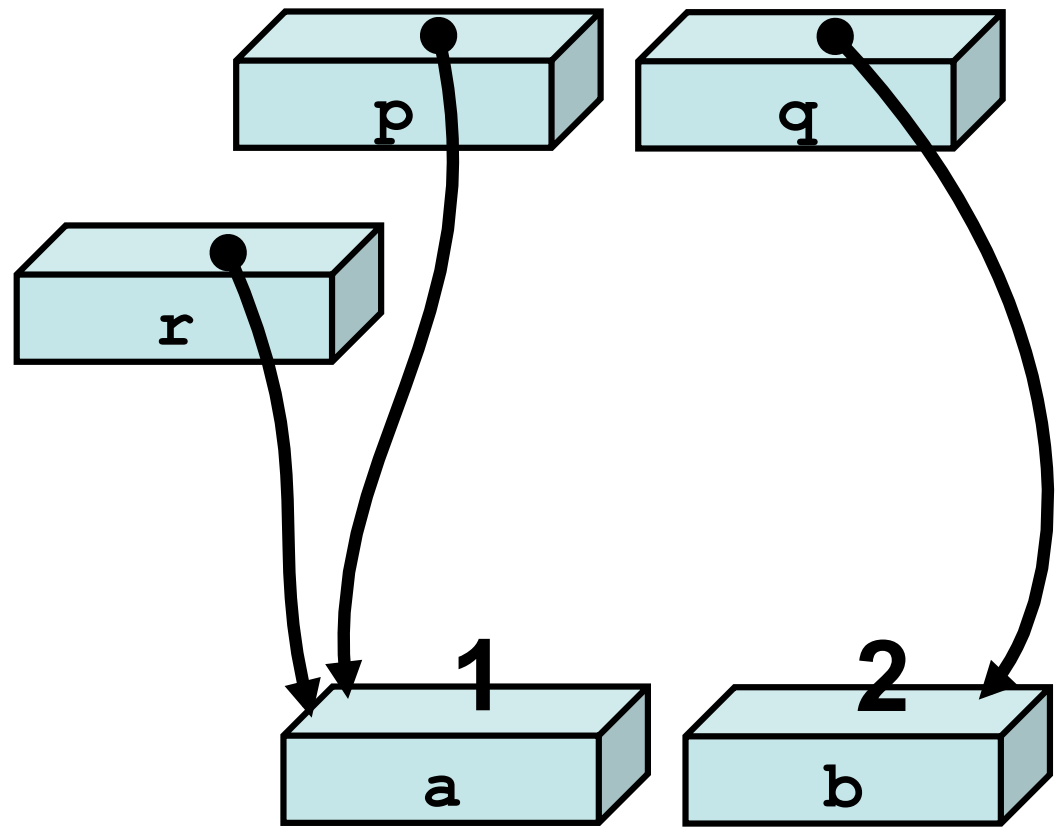
```
void f(int * p, int * q)
{
    int * r = p;
    → p = q;
    q = r;
}
```

...

```
int a = 1, b = 2;
```

```
→ f(&a, &b);
```

```
cout << a << " " << b << endl;
```



```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    q = r;
}
```



```
p = q;
```

```
q = r;
```

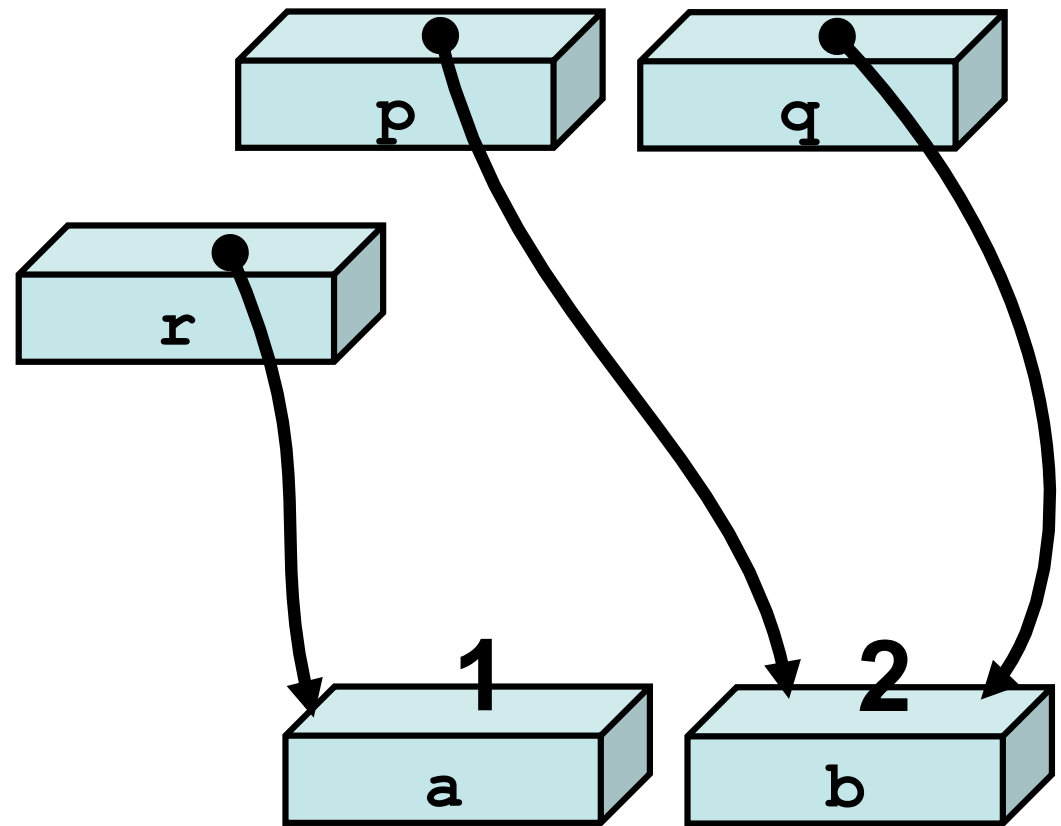
```
...
```

```
int a = 1, b = 2;
```



```
f(&a, &b);
```

```
cout << a << " " << b << endl;
```



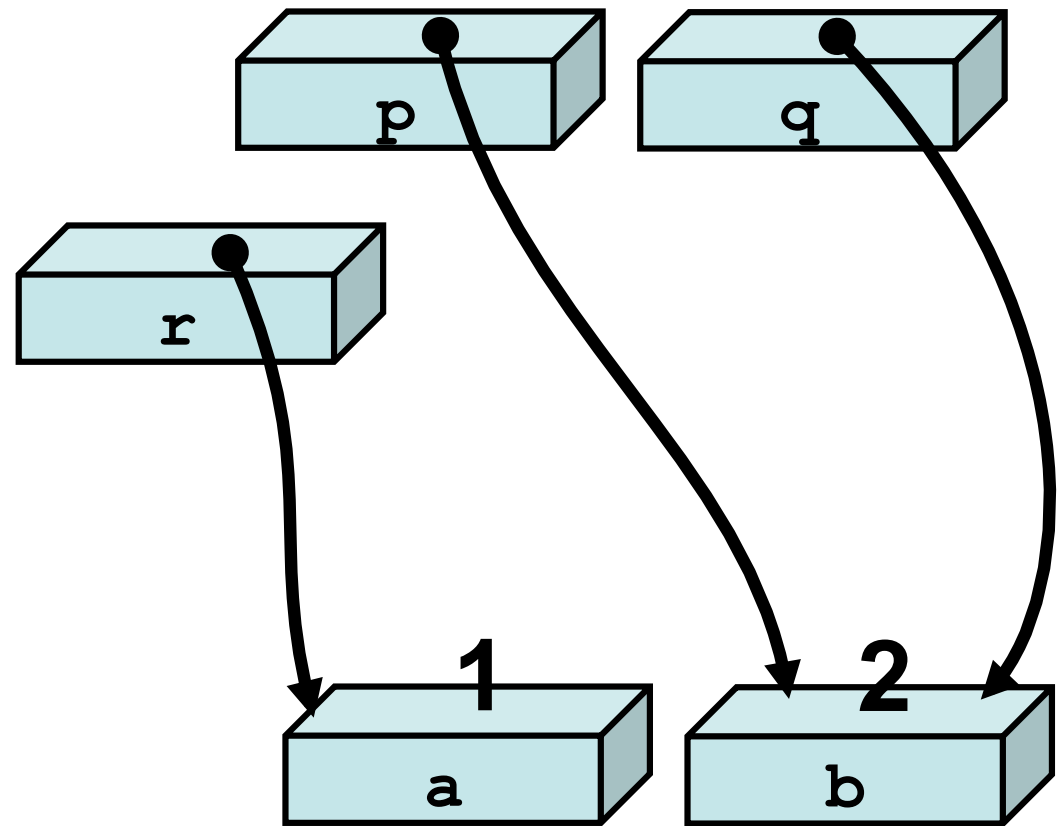
```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    → q = r;
}
```

...

```
int a = 1, b = 2;
```

```
→ f(&a, &b);
```

```
cout << a << " " << b << endl;
```



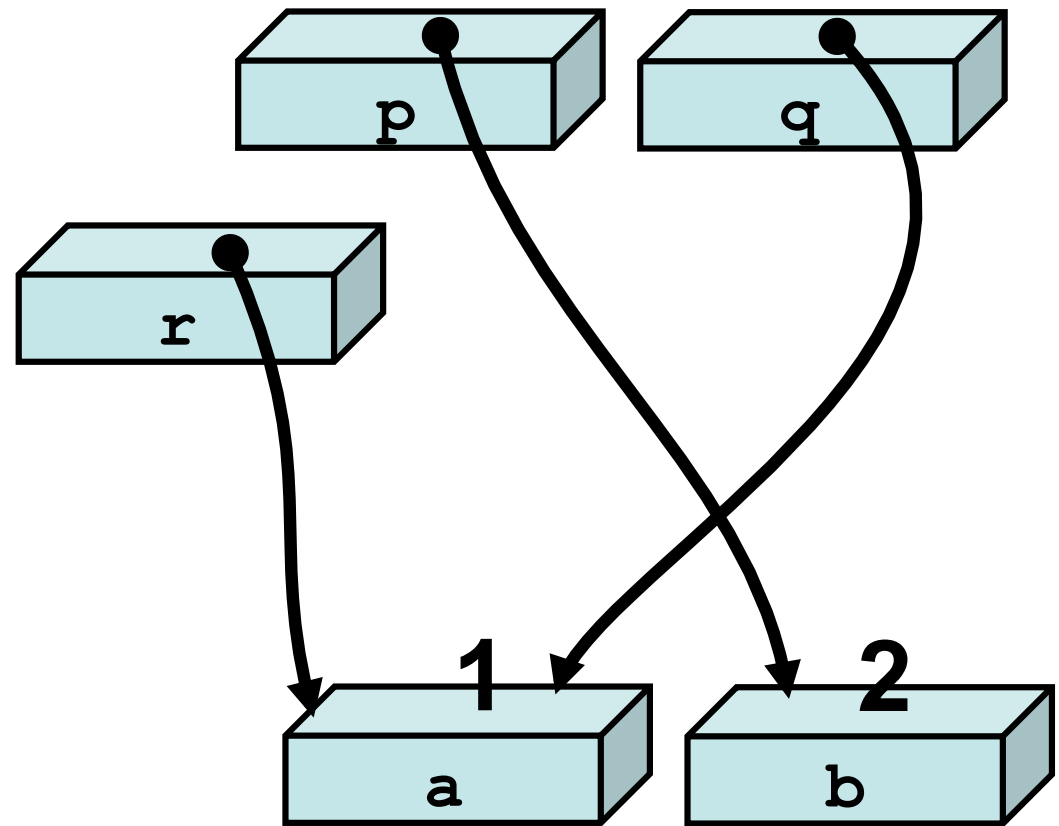
```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    → q = r;
}
```

...

```
int a = 1, b = 2;
```

```
→ f(&a, &b);
```

```
cout << a << " " << b << endl;
```



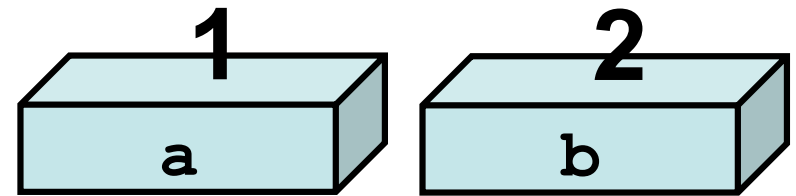
```
void f(int * p, int * q)
{
    int * r = p;
    p = q;
    q = r;
}
```

...

```
int a = 1, b = 2;
```

```
f(&a, &b);
```

```
→ cout << a << " " << b << endl;
```



Exercise

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}

void g(int * q, int r)
{
    q[r] = 0;
}

...

int T[4] = {1, 5, 6, 9};
int * p = T;

*p = *p + 1;
cout << T[0] << " " << T[1] << endl;

p = p + 1;
cout << T[0] << " " << T[1] << endl;

*p = *p + 1;
cout << T[0] << " " << T[1] << endl;

f(T, 2);
cout << T[2] << " " << T[3] << endl;

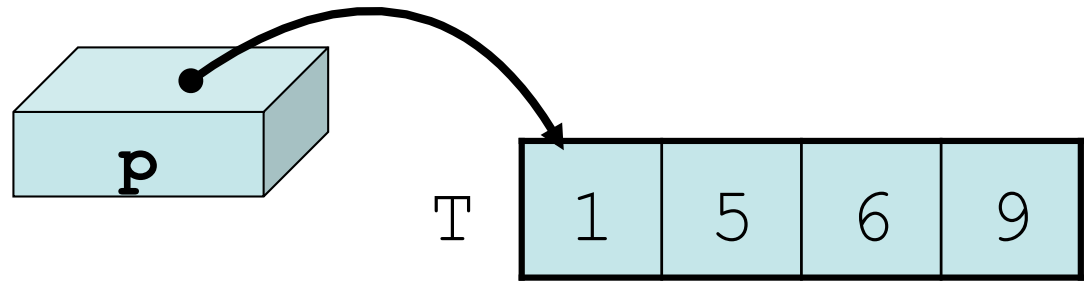
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
→ *p = *p + 1;
cout << T[0] << " " << T[1] << endl;

p = p + 1;
cout << T[0] << " " << T[1] << endl;

*p = *p + 1;
cout << T[0] << " " << T[1] << endl;

f(T, 2);
cout << T[2] << " " << T[3] << endl;

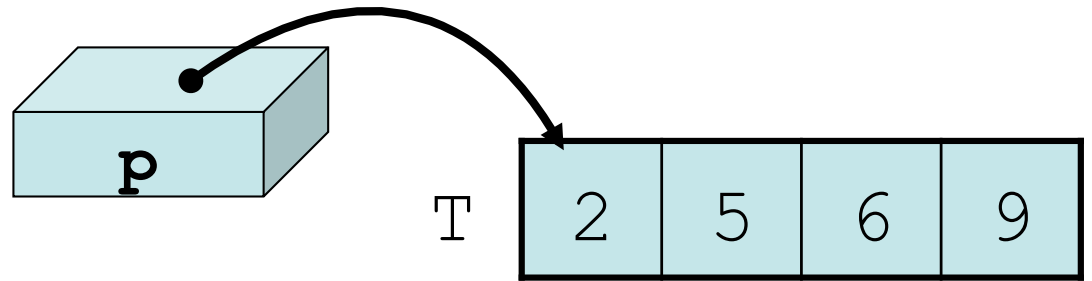
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
→ *p = *p + 1;
   cout << T[0] << " " << T[1] << endl;

   p = p + 1;
   cout << T[0] << " " << T[1] << endl;

   *p = *p + 1;
   cout << T[0] << " " << T[1] << endl;

   f(T, 2);
   cout << T[2] << " " << T[3] << endl;

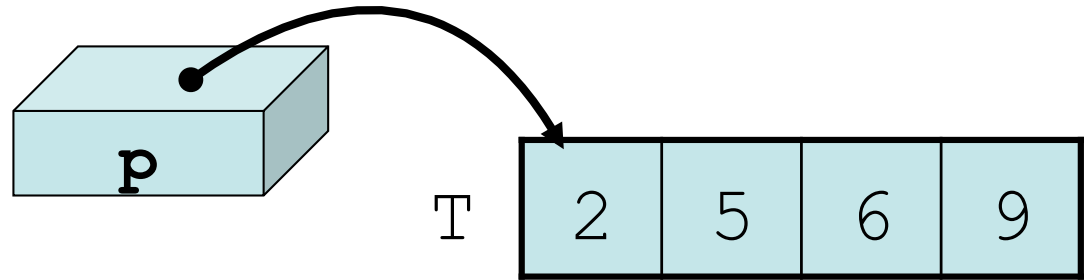
   g(T, 3);
   cout << T[2] << " " << T[3] << endl;
```

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
→ *p = *p + 1;
cout << T[0] << " " << T[1] << endl;

p = p + 1;
cout << T[0] << " " << T[1] << endl;

*p = *p + 1;
cout << T[0] << " " << T[1] << endl;

f(T, 2);
cout << T[2] << " " << T[3] << endl;

g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

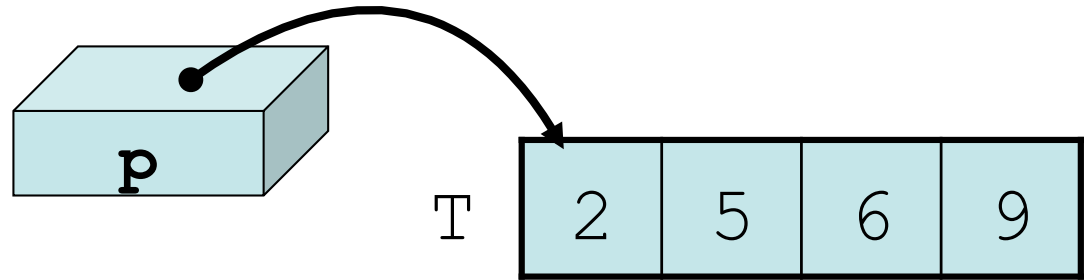


```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



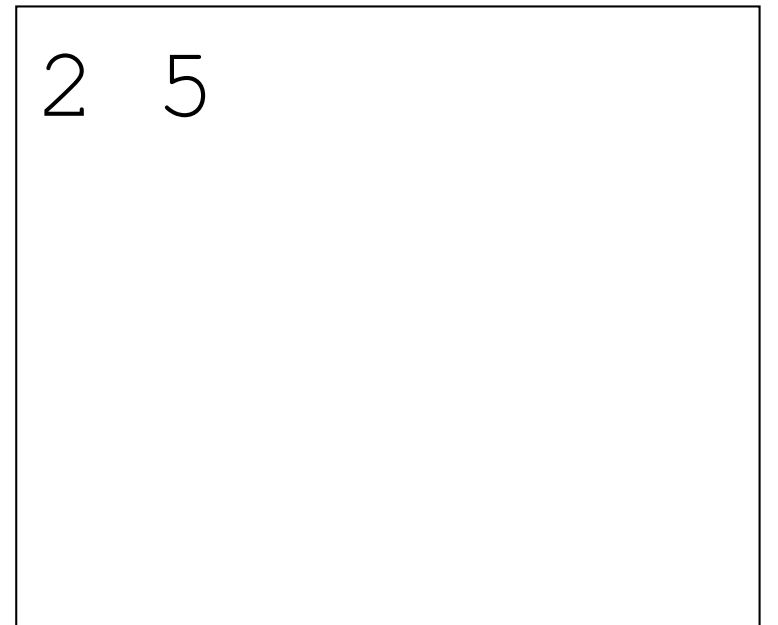
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

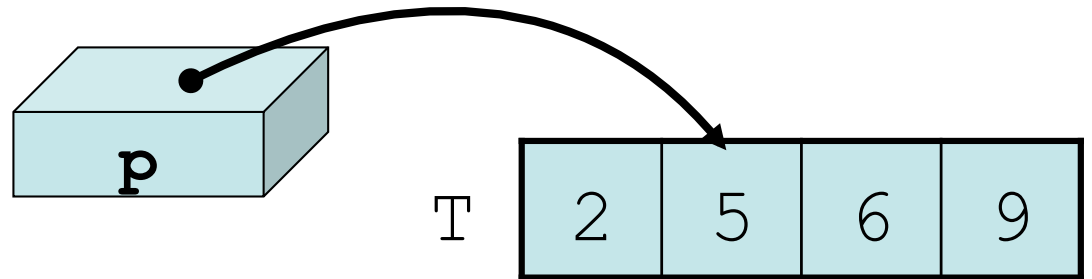


```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



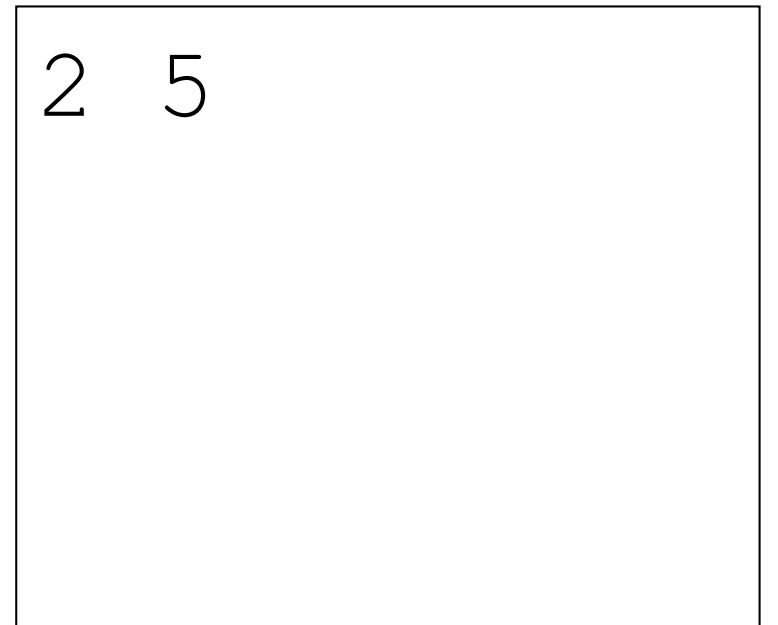
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

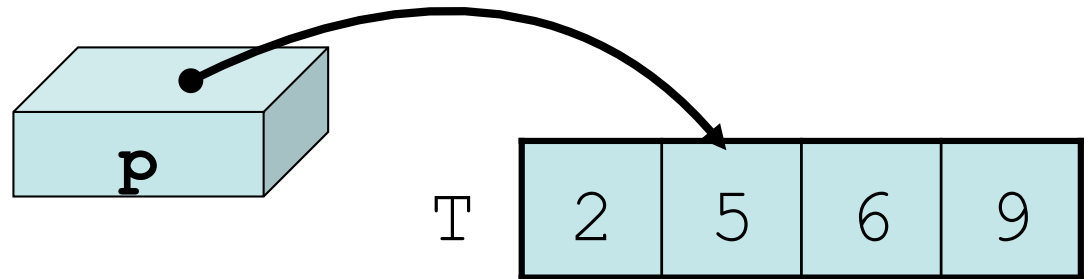


```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



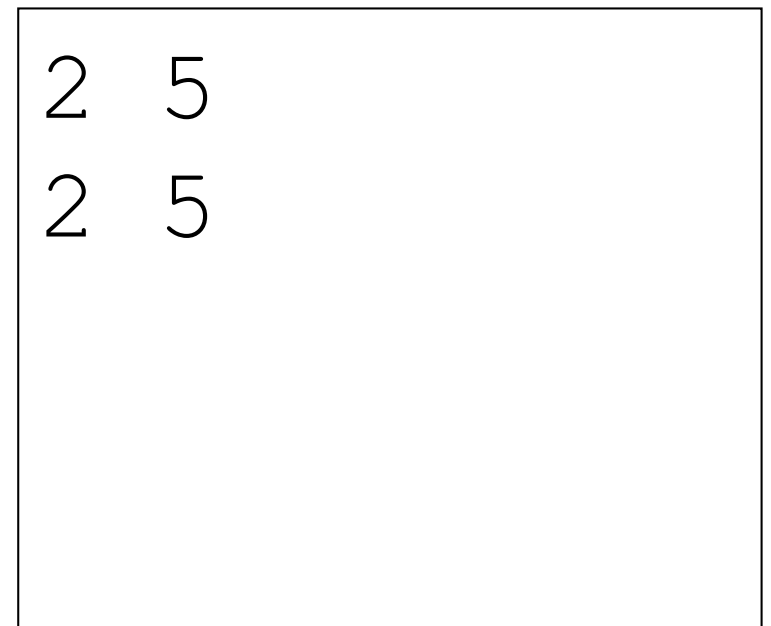
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

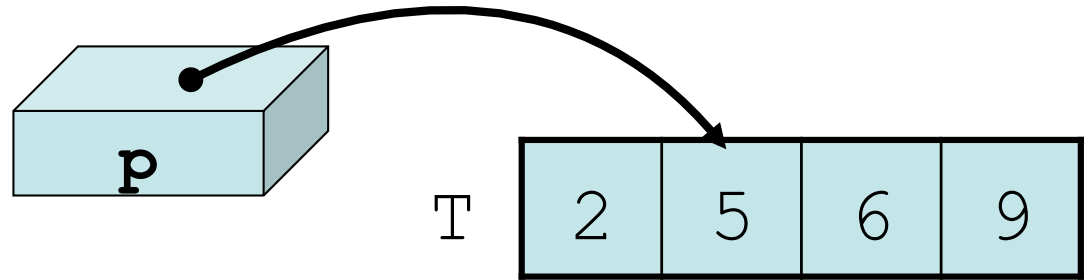


```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



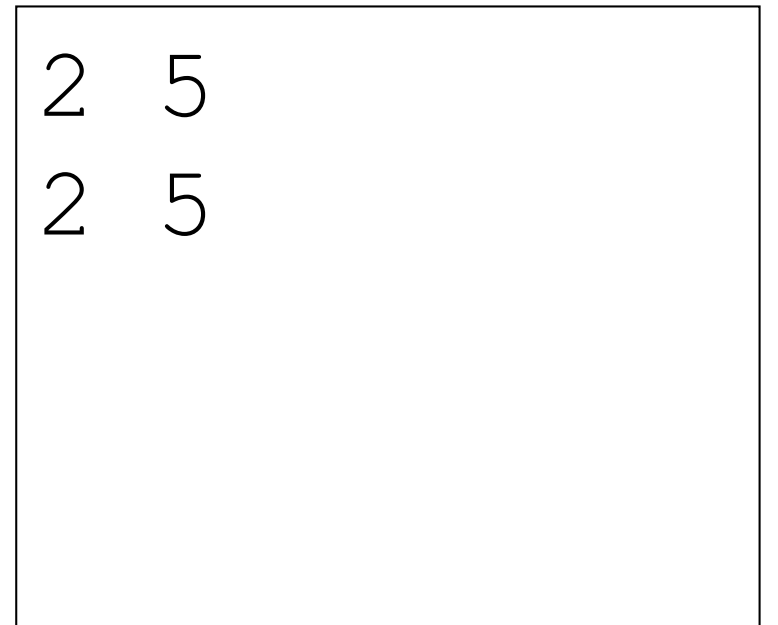
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ *p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

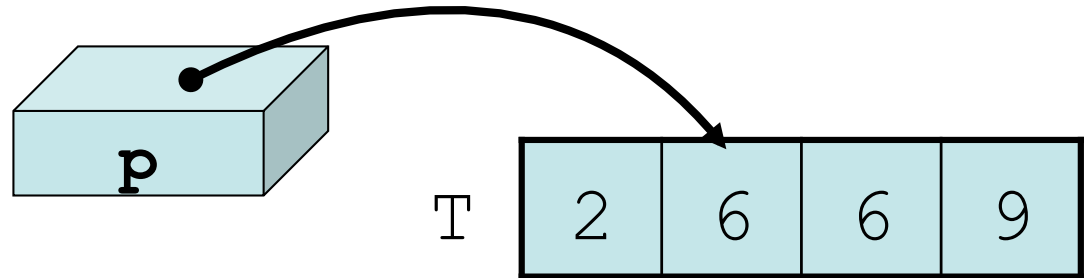


```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



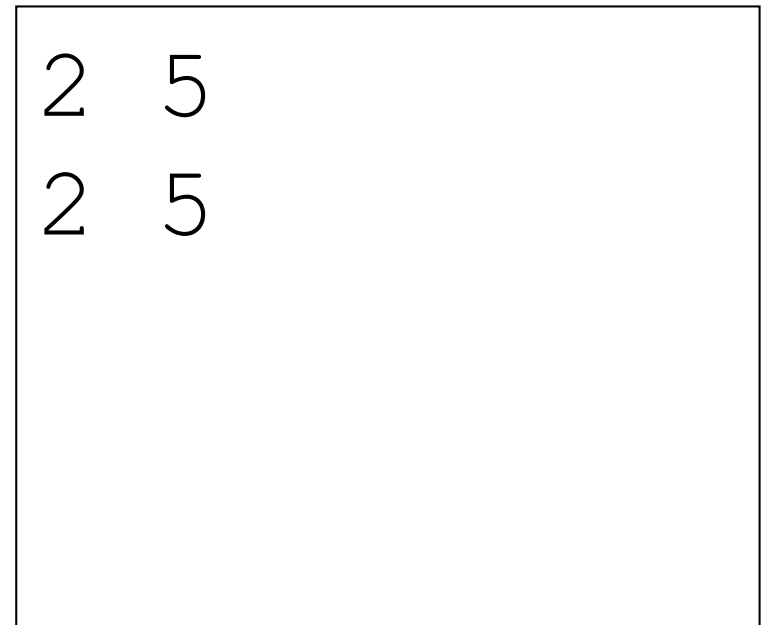
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ *p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

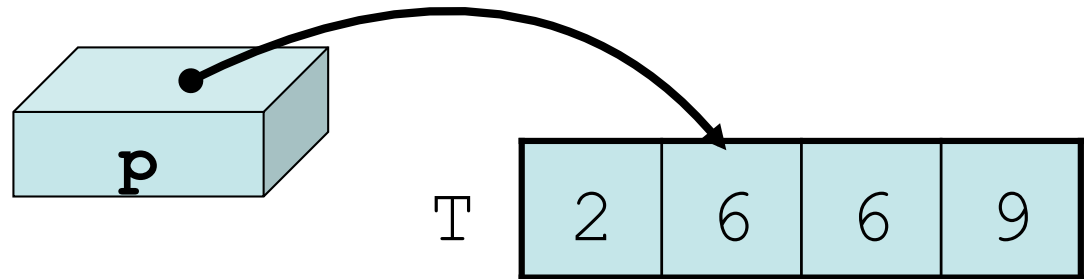
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ *p = *p + 1;
   cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



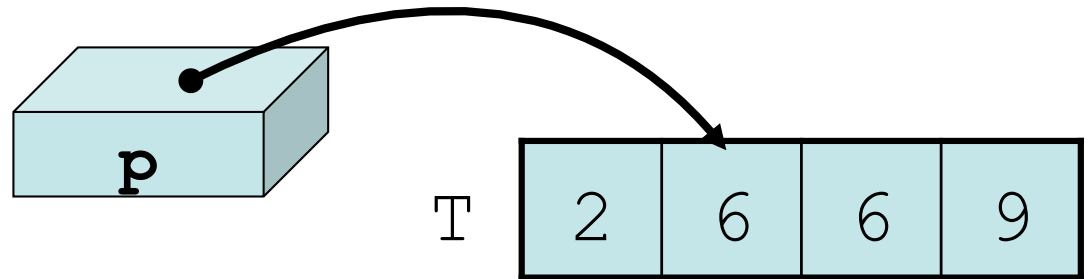
2	5
2	5
2	6

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

2	5
2	5
2	6



```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

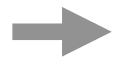
...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

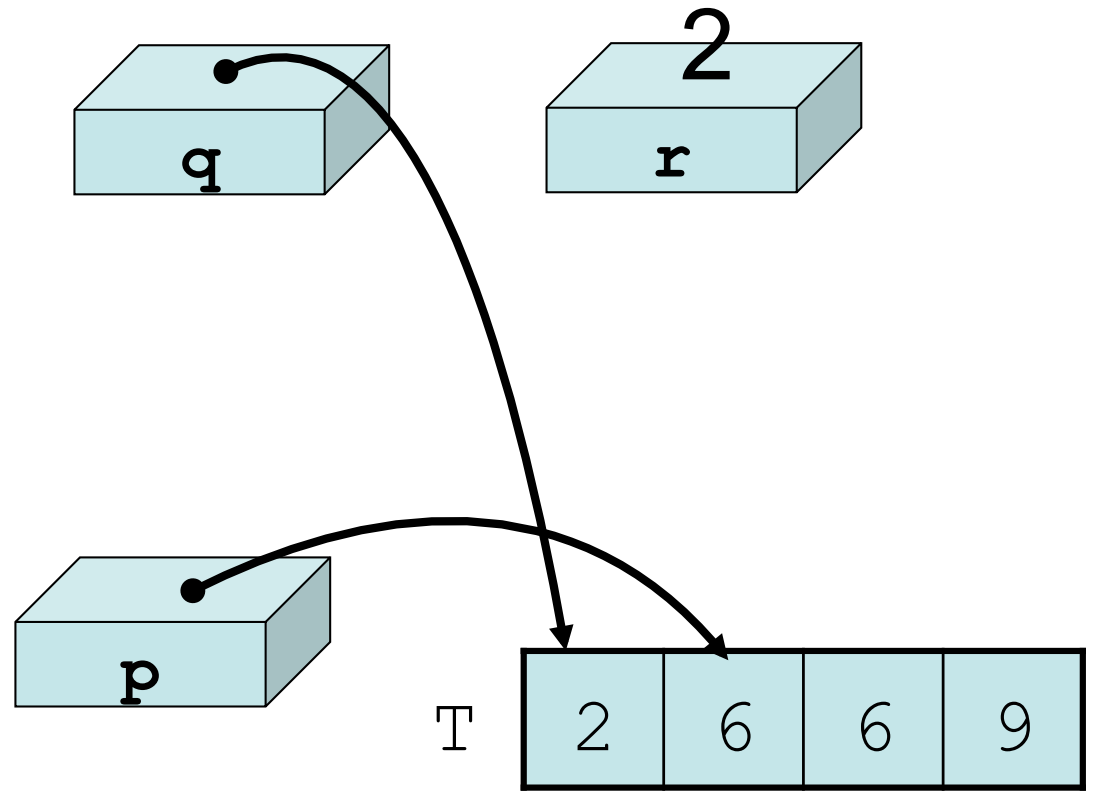
```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```



```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



2	5
2	5
2	6

```

void f(int * q, int r)
{
  → q = q + r;
  *q = 0;
}

```

```

void g(int * q, int r)
{
  q[r] = 0;
}

```

...

```

int T[4] = {1, 5, 6, 9};
int * p = T;

```

```

*p = *p + 1;
cout << T[0] << " " << T[1] << endl;

```

```

p = p + 1;
cout << T[0] << " " << T[1] << endl;

```

```

*p = *p + 1;
cout << T[0] << " " << T[1] << endl;

```

```

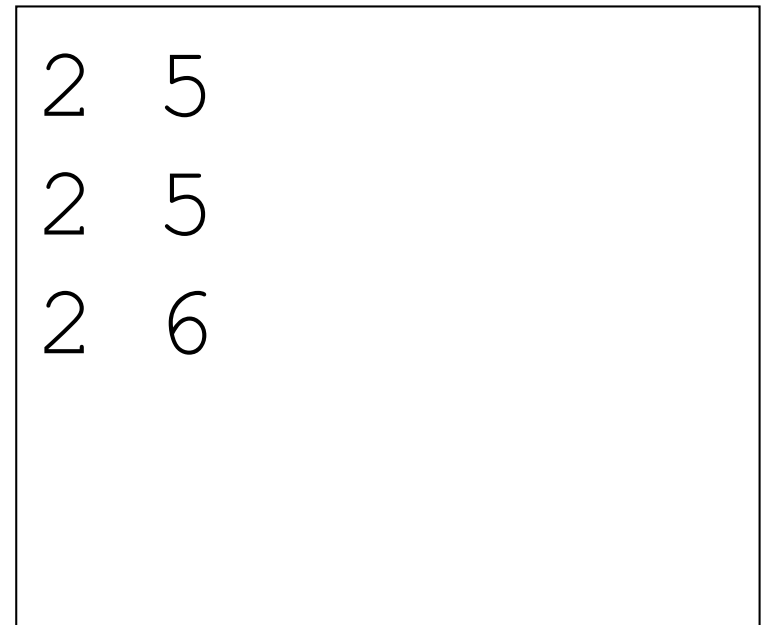
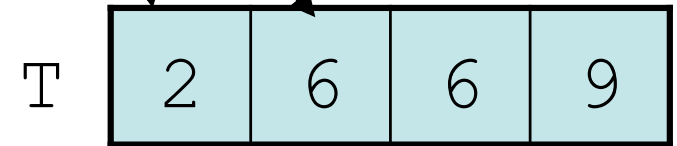
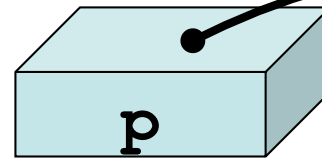
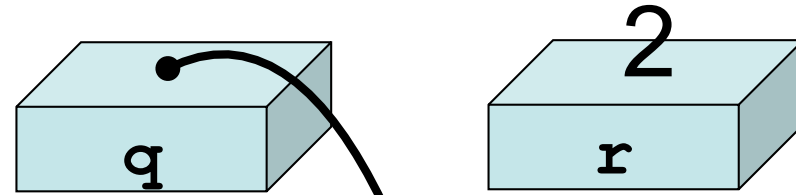
→ f(T, 2);
cout << T[2] << " " << T[3] << endl;

```

```

g(T, 3);
cout << T[2] << " " << T[3] << endl;

```



```
void f(int * q, int r)
{
  q = q + r;
  *q = 0;
}
```



```
void g(int * q, int r)
{
  q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

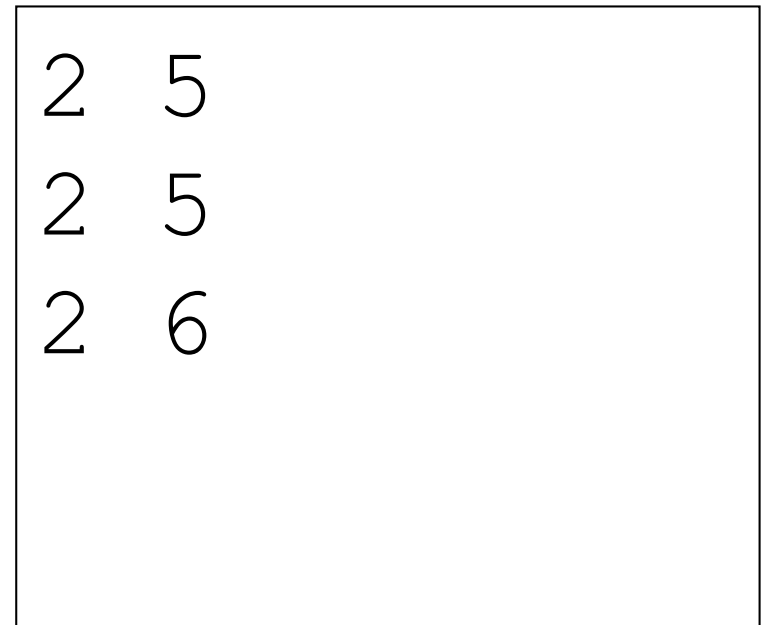
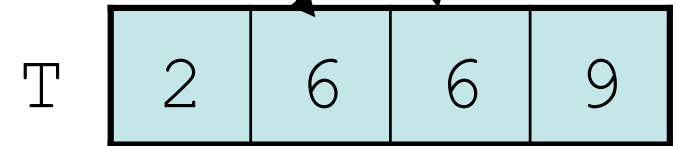
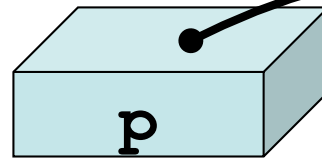
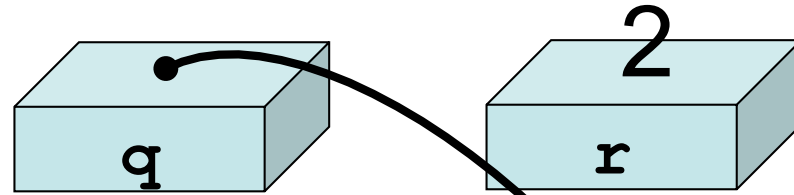
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



```
void f(int * q, int r)
{
  q = q + r;
  *q = 0;
}
```



```
void g(int * q, int r)
{
  q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

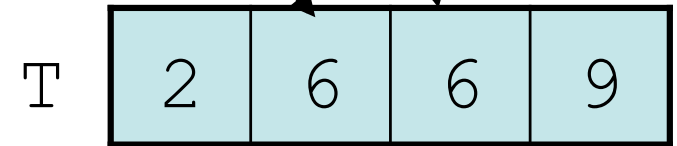
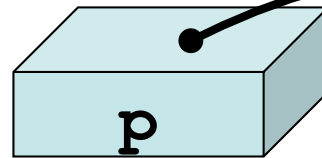
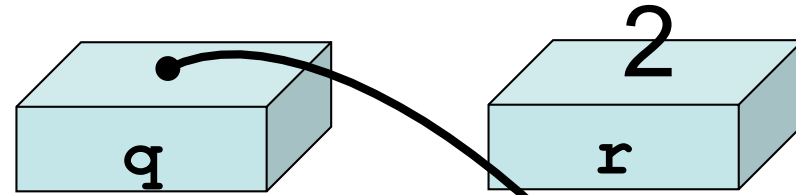
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



2	5
2	5
2	6

```
void f(int * q, int r)
{
  q = q + r;
  *q = 0;
}
```



```
void g(int * q, int r)
{
  q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

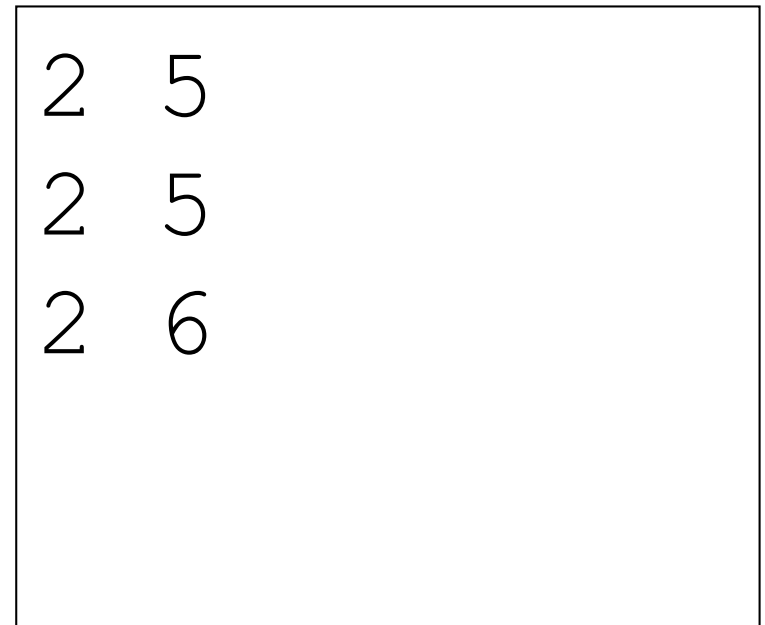
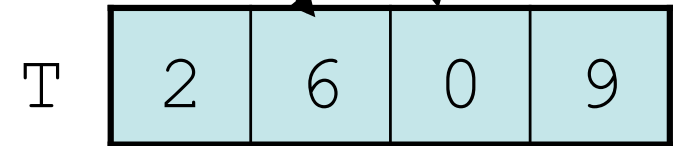
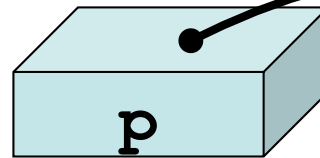
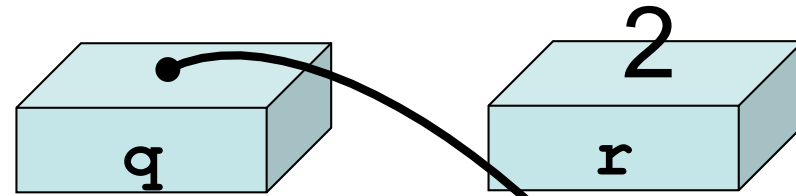
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

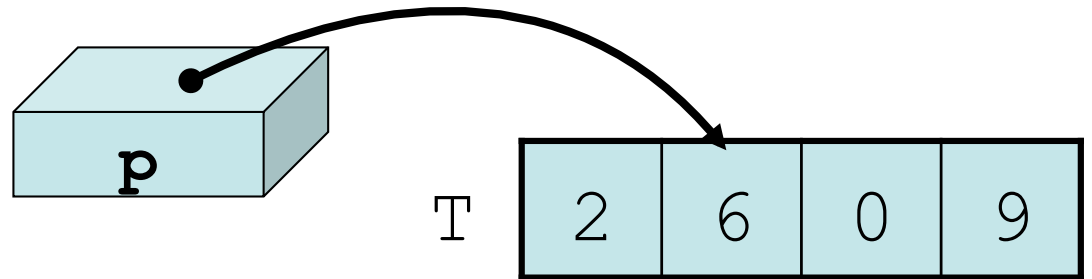


```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
→ f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

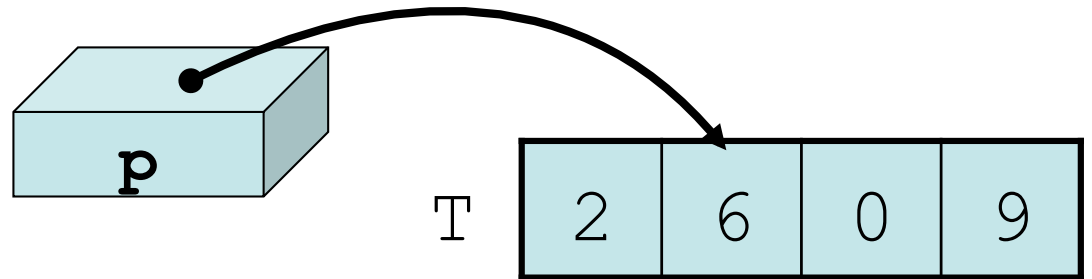
2	5
2	5
2	6
0	9

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

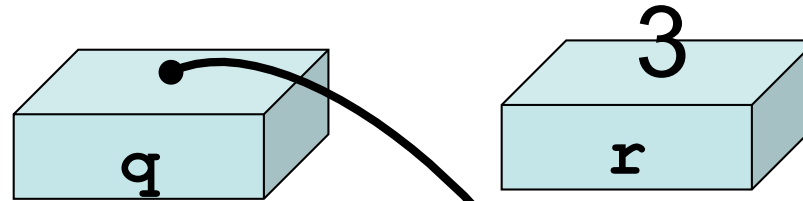
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

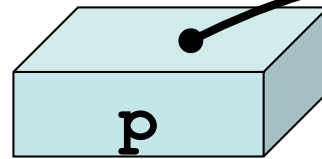
```
➔ g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

2	5
2	5
2	6
0	9

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

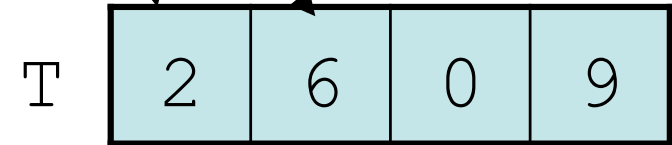


```
void g(int * q, int r)
{
    q[r] = 0;
}
```



...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```

2	5
2	5
2	6
0	9

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

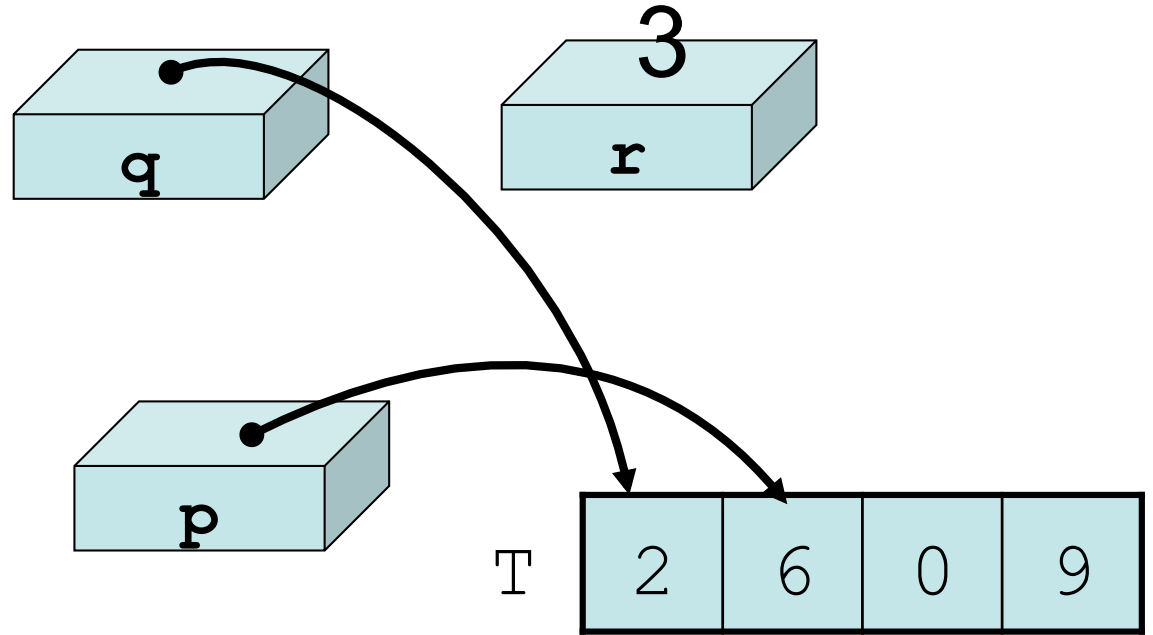
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



2	5
2	5
2	6
0	9

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```

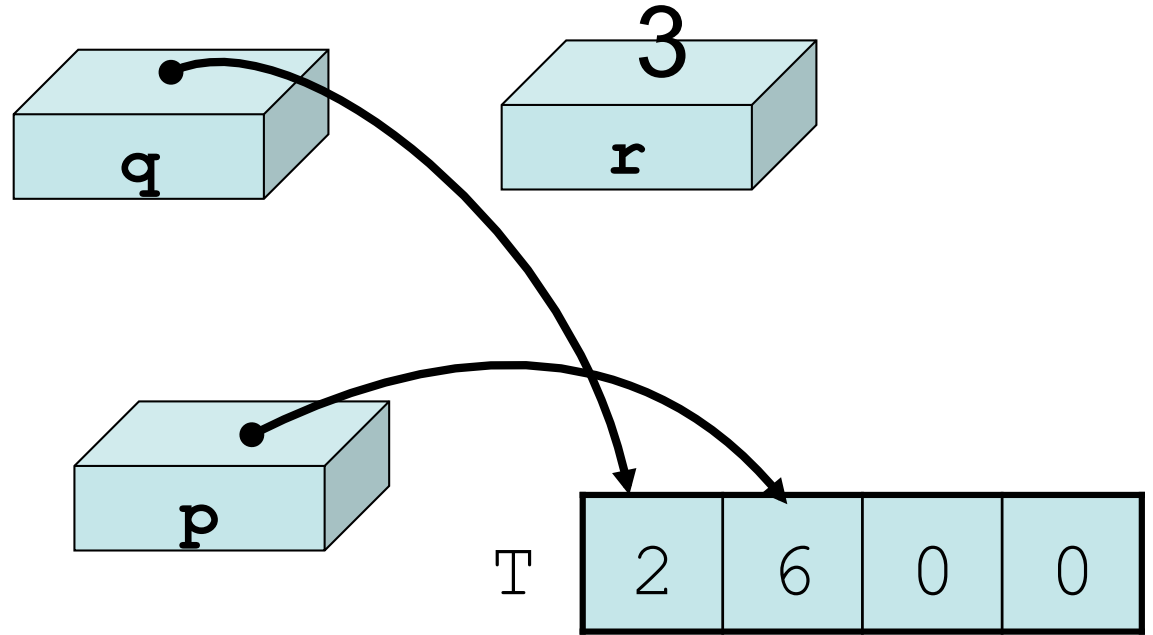
```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
cout << T[2] << " " << T[3] << endl;
```



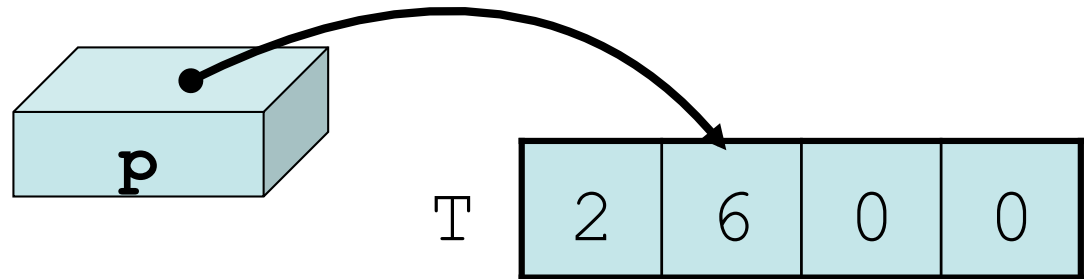
2	5
2	5
2	6
0	9

```
void f(int * q, int r)
{
    q = q + r;
    *q = 0;
}
```

```
void g(int * q, int r)
{
    q[r] = 0;
}
```

...

```
int T[4] = {1, 5, 6, 9};
int * p = T;
```



```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
p = p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
*p = *p + 1;
cout << T[0] << " " << T[1] << endl;
```

```
f(T, 2);
cout << T[2] << " " << T[3] << endl;
```

```
g(T, 3);
➔ cout << T[2] << " " << T[3] << endl;
```

2	5
2	5
2	6
0	9
0	0

Exercise

```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

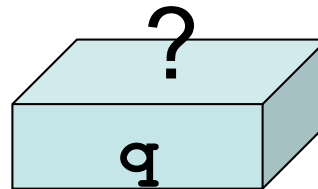
...

```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

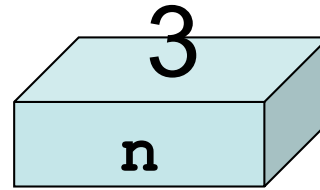


...

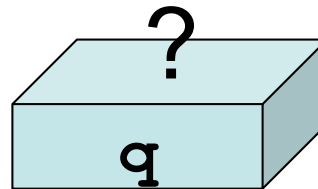
```
→ int * q = f(3);
   cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

```
→ int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

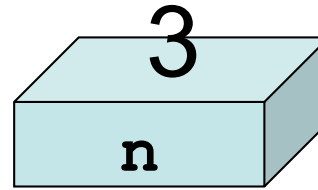


...

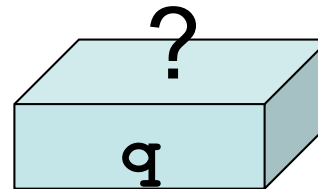
```
→ int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



...

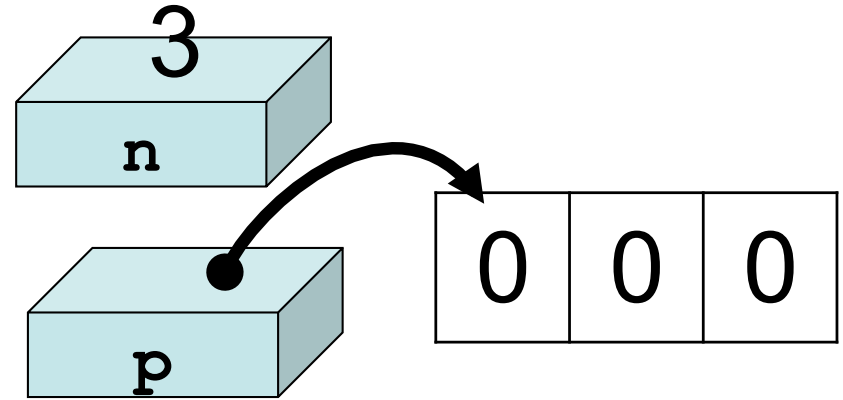
```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

```

int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}

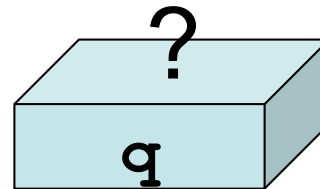
```



```

int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}

```



...



```

int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;

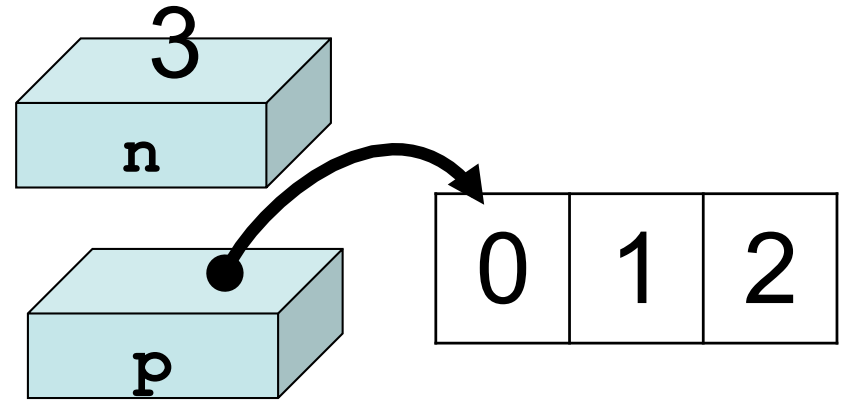
```

```

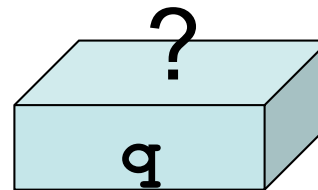
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;

```

```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



...



```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

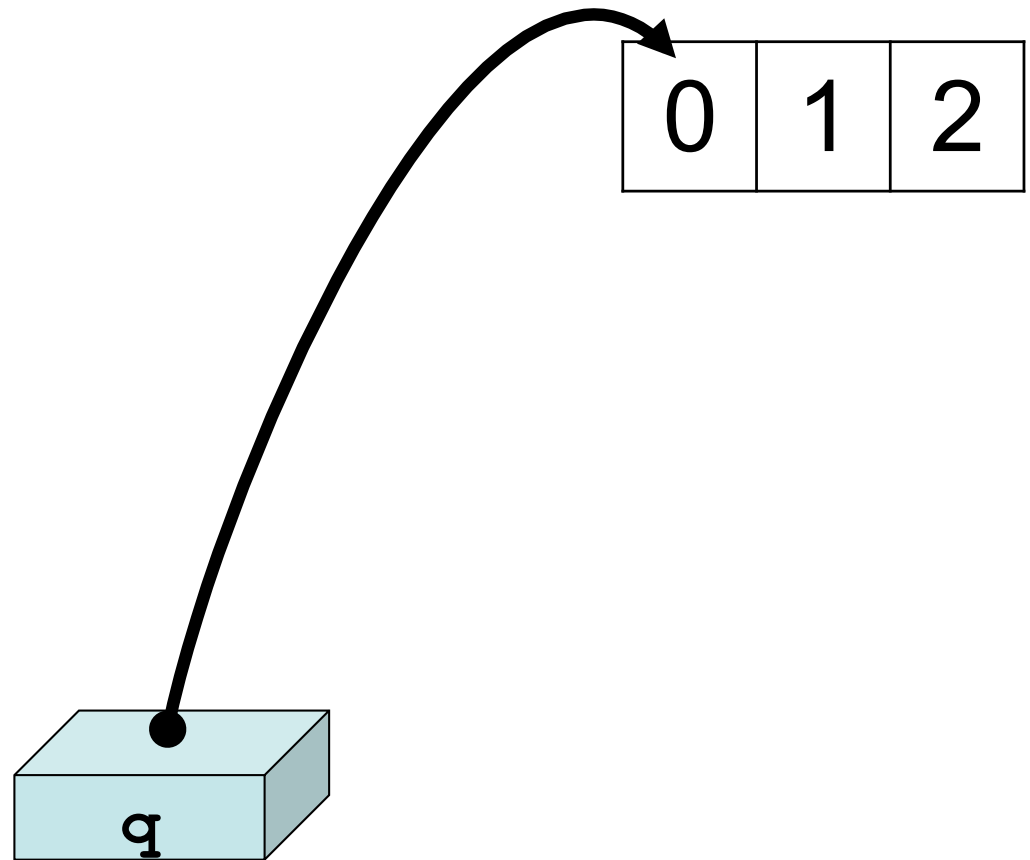
```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

...

```
→ int * q = f(3);
   cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```



```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

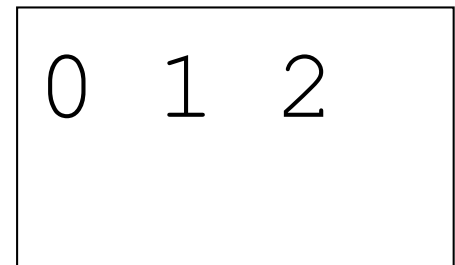
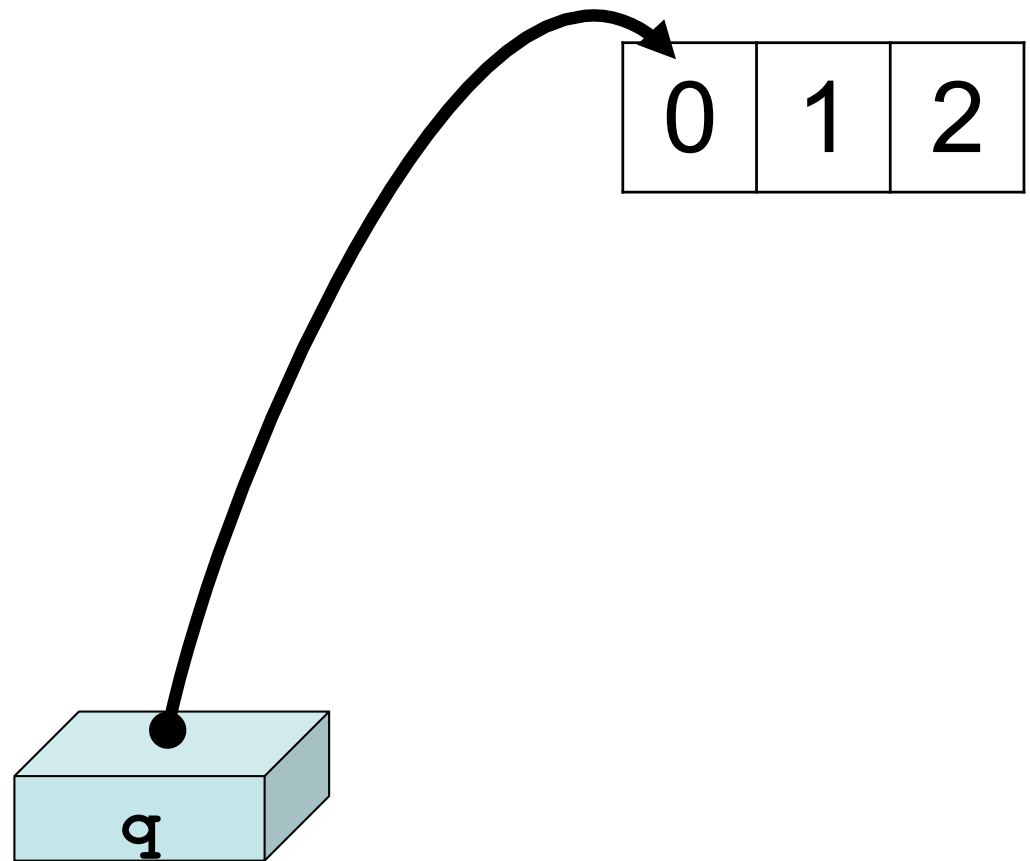
...

```
int * q = f(3);
```

```
→ cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

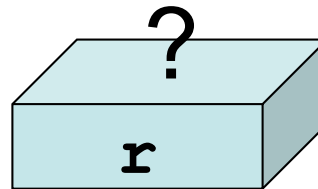
```
int * r = g(3);
```

```
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```



```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



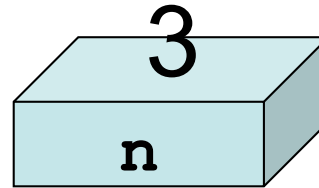
...

```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

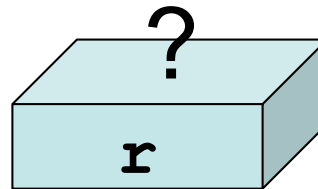
```
→ int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

0	1	2
---	---	---

```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



```
→ int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



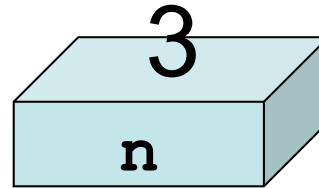
...

```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

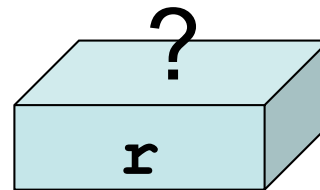
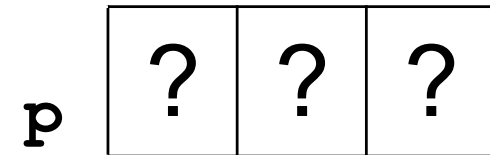
```
→ int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

0	1	2
---	---	---

```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

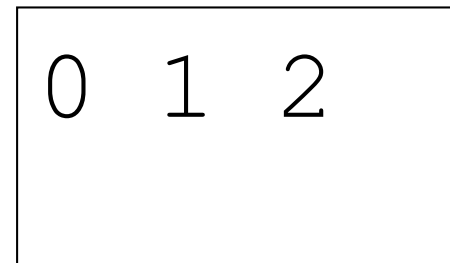


...

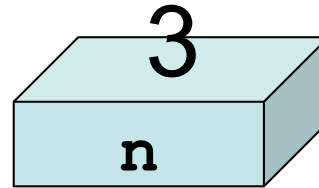
```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```



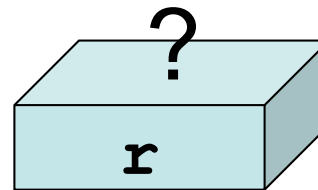
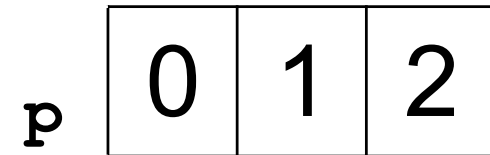
```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```



```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



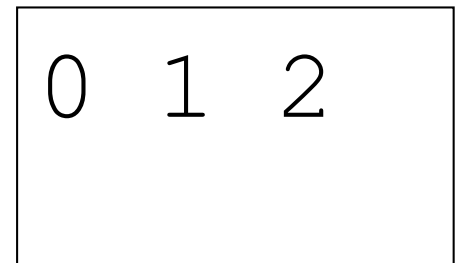
```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    → return p;
}
```



...

```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
→ int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```



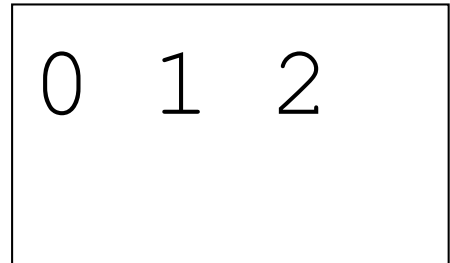
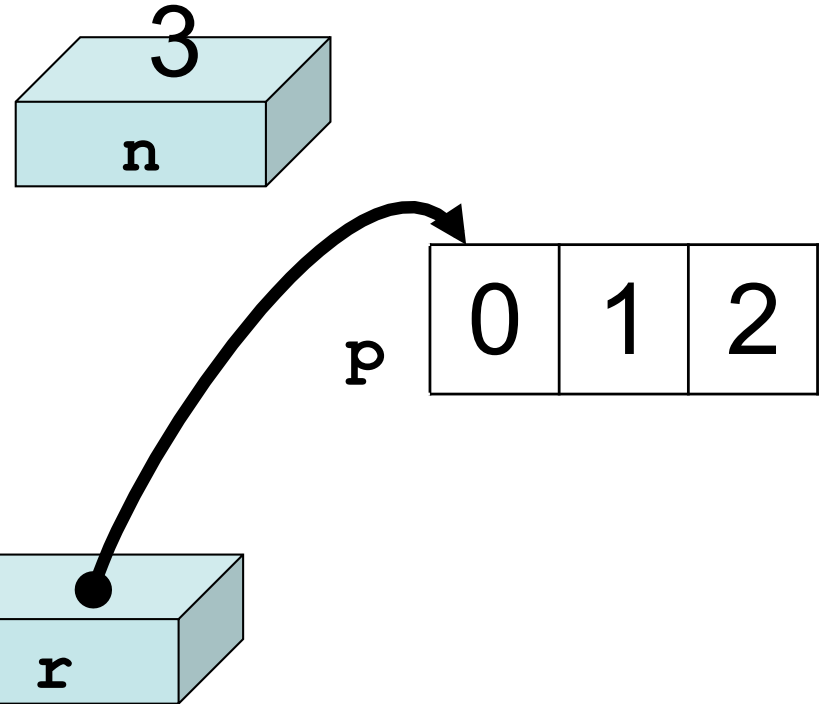
```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

...

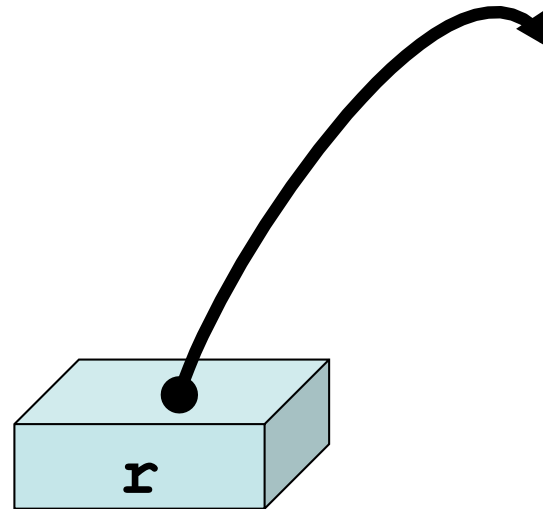
```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```



```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```



...

```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
→ int * r = g(3);
   cout << r[0] << " " << r[1] << " " << r[2] << endl;
```

0	1	2
---	---	---

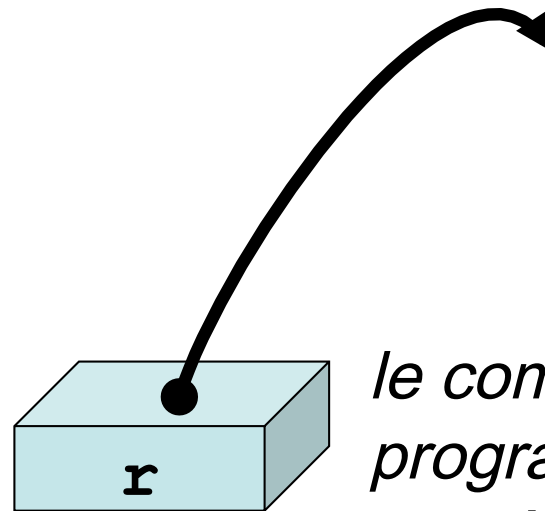
```
int * f(int n)
{
    int * p = new int[n];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

```
int * g(int n)
{
    int p[3];
    for(int i = 0; i < n; i++)
        p[i] = i;
    return p;
}
```

...

```
int * q = f(3);
cout << q[0] << " " << q[1] << " " << q[2] << endl;
```

```
int * r = g(3);
cout << r[0] << " " << r[1] << " " << r[2] << endl;
```



le comportement du programme devient imprévisible!

0	1	2
---	---	---