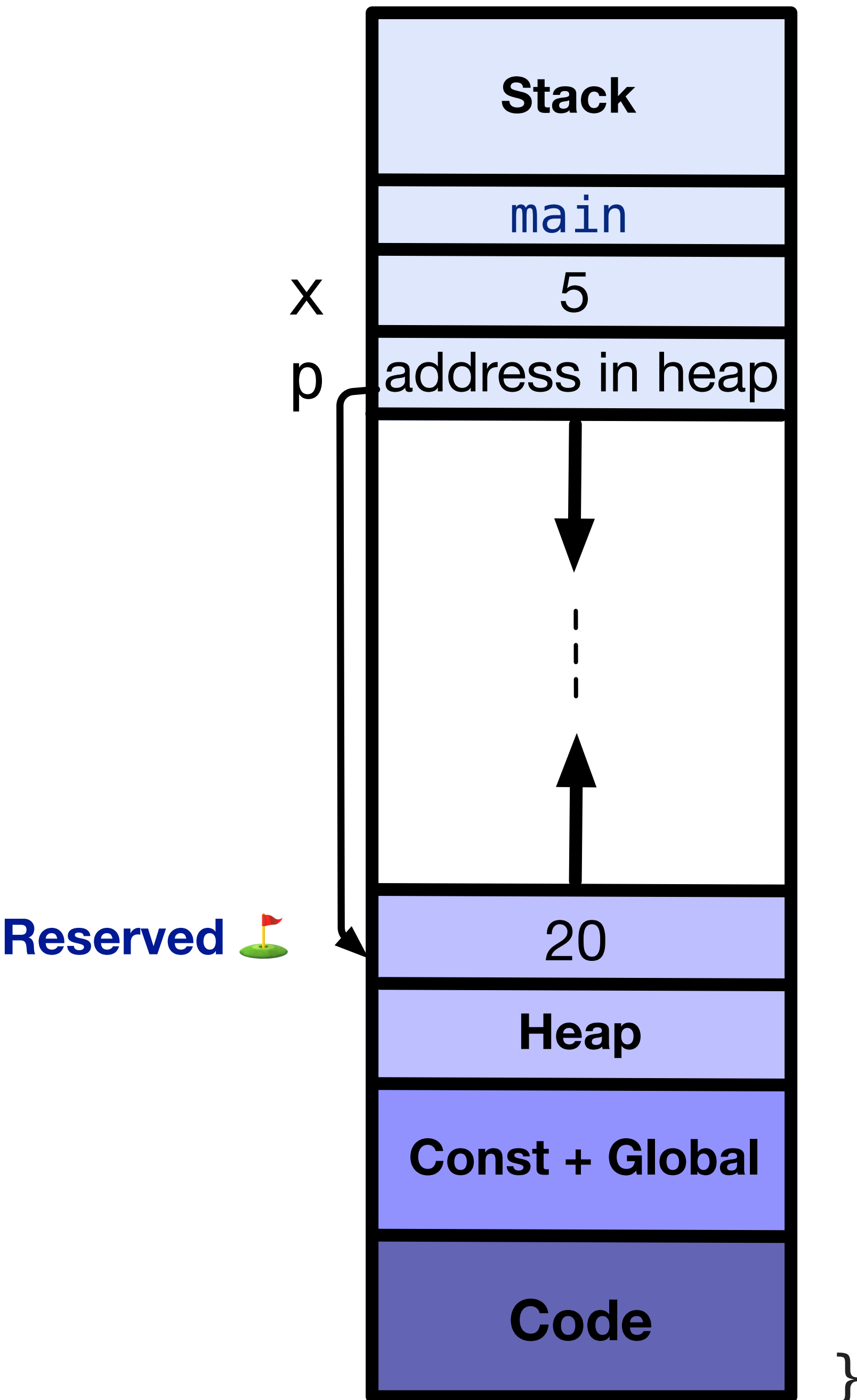


Main memory



```
#include <iostream>
using namespace std;
```

```
int main(){
    int x = 10;
    int* p = NULL;
    p = &x;
    *p = 5;
```

①

Allocate memory for an **int** on the heap

```
p = new int;
```

②

return its address and store it in p

```
*p = 20;
```

prints 20

```
cout << "Value at p: " << *p << endl;
```

```
cout << "Value of x: " << x << endl;
```

prints 7

Will reveal in the next figure