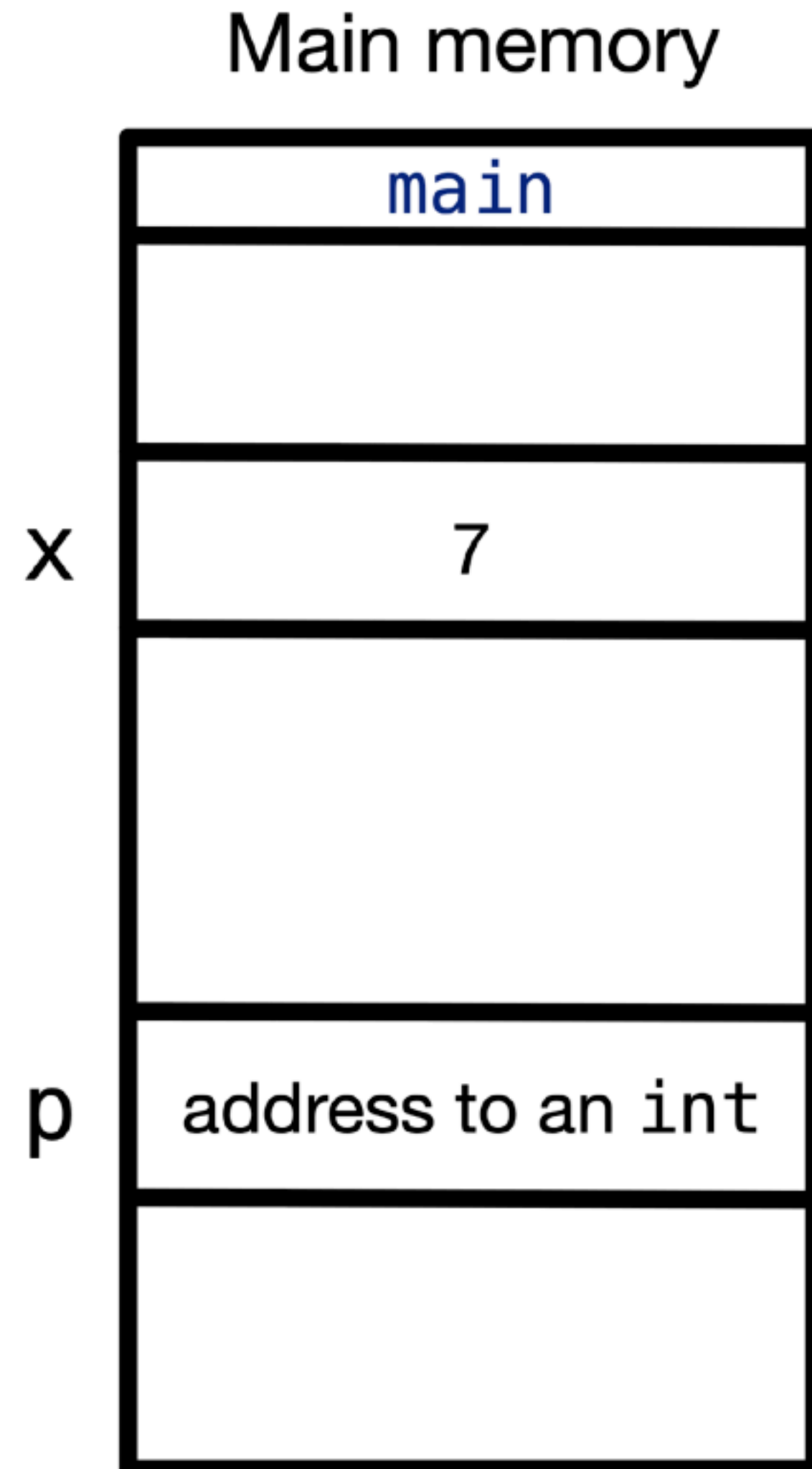


Pointers point to memory

- Recall that memory is composed of bytes (8 bits)
- Each byte has its own memory address
- A pointer is a variable that stores the location of something in memory
- Example: $A = [1, 2, 3]$
 - A is a variable that holds the information about the memory location of the array - arrays are too big to store in a single location, so we instead pass around the memory address of the array to reference it

Special pointer syntax

Some languages have special syntax for pointers, like C and C++



```
#include <stdio.h>
```

```
int main(void) {
```

① `int x = 7;` data type of x is int

② `int *p;` data type of p is int*

```
    return 0;
```

```
}
```