Defining Pointers

To define a pointer, add an asterisk (`*`) between the variable type and the variable name in the variable definition. Here, `p` is a pointer variable that "points to" an `int`; its type is **pointer-to-int**.

```
int *p;
```

In this context, `*` is the **pointer declarator operator**. It turns the name on its right into a pointer to the type on its left. The line below defines `cptr`, a **pointer-to-char**.

```
char *cptr;
```

Even though `p` and `cptr` are both **pointers**, **each is a distinct type**; pointers are very strongly typed and there are **no implicit conversions between pointer types**.

A pointer **belongs syntactically with the variable name** and not with the base type.

```
int* p1, p2;      // p1 is a pointer, p2 an int
int *p3, *p4;     // Both are pointers
```

If you use the same declaration to define two pointers of the same type, you need to mark each of the variables with an asterisk.