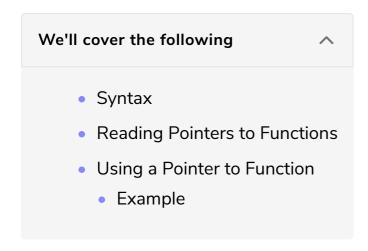
Pointer to a function

This lesson explains how a pointer to a function works using an example



A *pointer* contains a reference. It may also point to a *function*.

Syntax

The *syntax* for declaring a *function pointer* is as follows:

```
functiontype (pointer to function)(datatype);
```

Reading Pointers to Functions

If you're given a pointer to a function as follows:

```
void (*fp)(float);
```

It means that *fp is a *pointer* to a function that takes a float type argument and returns void.

Using a Pointer to Function

Now let's take a look at how we can use **pointers to functions** while coding in C++.

Example

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

/* Declaration */
void (*fp)(): //fp is a pointer to a function taking zero arguments and that returns void
```

/* Initialization */
void foobar()
{
 std::cout << "Hello from foobar()" << std::endl;
}
int main(){
 fp = &foobar; //to initialize a function pointer we give it the address of the function foobar
 /* Now we call fp that contains the address of the function foobar()*/
 fp();
}</pre>







[]

This marks the end of the chapter on *arrays* and *pointers*. Next up, we will discuss *classes* in C++. Stay Tuned!