

A Constructor is a 'special type of member function' that is called automatically when an object is created.

In C++, a Constructor has the same name as that of the class & it does not have a return type for Example,

```
Class Wall {
```

```
public:
```

```
    // Create a Constructor
```

```
    Wall()
```

```
    // code
```

```
};
```

Here, the function `wall()` is a Constructor of the class `wall`. Notice that the Constructor:

- has the same name as class name.
- does not have return type, is public.

## C++ Default Constructor

A Constructor with no parameter is known as a default Constructor. In this example above `wall()` will be a default Constructor.



### Example 1: Default Constructor

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

```
// declare the class
class wall {
private
    double length;
```

```
public:
```

```
// default constructor to initialize variables.
```

```
wall() {
```

```
    length = 5.5;
```

```
    cout << "Creating a wall." << endl;
```

```
    cout << "Length = " << length << endl;
```

```
}
```

```
};
```

```
int main() {
```

```
    wall wall1;
```

```
    return 0;
```

```
}
```

Output :-

Creating a wall

Length = 5.5.



Here, when the walk object is created the walk() constructor is called. This sets the length variable object to 5.5.

## C++ parameterized Constructors

In C++, a constructor with parameter is known as a parameterized constructor. This is the preferred method to initialize members data.

## C++ Copy Constructor

The copy constructor in C++ is used to copy data of one object to another.

### Note :-

A constructor is primarily used to initialize object. They are also used to run a default code when an object is created.