

What is a Constructor?

- Constructors are special methods whose name is the same as the class name.
- It is invoked automatically when an object is created to initialize an object
- It does not have explicit return type.

Types of Constructors:

1. Default constructor
2. Parameterized constructor
3. Copy constructor

Default constructor: The default constructor is the constructor which doesn't take any argument. It has no parameters.

```
class ABC
{
    int x;

    ABC()
    {
        x = 0;
    }
}
```

Parameterized constructor: The constructors that take some arguments are known as parameterized constructors

```
class ABC
{
    int x;

    ABC(int y)
    {
        x = y;
    }
}
```

Copy Constructor: It is a type of constructor, whose purpose is to copy an object to another. It means that a copy constructor will clone an object and its values, into another object of same class.

```
class ABC
{
    int x;

    ABC(int y)
    {
        x = y;
    }
    // Copy constructor
    ABC(ABC abc)
    {
        x = abc.x;
    }
}
```