Constructor Overloading

- Constructor overloading can be defined as the concept of having more than one constructor with different parameters so that every constructor can perform a differenttask.
- As there is a concept of function overloading, similarly constructor overloading is applied when we overload a constructor more than a purpose.
- The declaration is the same as the class name, but there is no return type as they areconstructors.
- The criteria to overload a constructor is to differ the number of arguments or the typeof arguments.
- The corresponding constructor is called depending on the number and type of arguments passed.

```
class smartphone{

    //Data Members(Properties)
    string model;
    int year_of_manufacture;
    bool _5g_supported;

    public:
    //constructor with 0 parameter
    smartphone(){
        model = "unknown";
        year_of_manufacture = 0;
        _5g_supported = false;
    }

    //constructor with 2 parameter
    smartphone(string model_string, bool _5g_){
        model = model_string;
        _5g_supported = _5g_;
    }
```

Example using smartphone class:

```
    //constructor with 3 parameter
    smartphone(string model_string, int manufacture, bool _5g_){
        //initialising data members
        model = model_string;
        year_of_manufacture = manufacture;
        _5g_supported = _5g_;
    }
};


int main(){
    //creating objects of smartphone class

    // using constructor with 0 parameter
    smartphone unknown;

    //using constructor with 0 parameter
    smartphone redmi("Note 7 Pro", false);

    // using constructor with 3 parameter
    smartphone iphone("iphone 11", 2019, false );
}
```