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Constructors

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What is Constructor

- Special member of class, which contains initialization logic of an object.
- Constructor gets executed automatically, when a new object is created for the class.
- Constructor initializes the fields and also contains the additional initialization logic (if any).

```
public ClassName(DataType Parameter1,...)
{
     ...
}
```

Rules for Constructor

- Constructor's name should be same as class name.
- Constructor must be "public" member or "internal" member; if it is a "private member", it can be called within the same class only; so, you can create object only inside the class.
- Constructor can have one or more parameters.
- Constructor can't return any value.
- A class can have one or more constructors; but all the constructors of the class must have different types of parameters.
- If the class doesn't have any constructor, the C#.net compiler automatically provides an empty constructor, which is called as "default constructor" / "implicit constructor".

Types of Constructor

- Based on Parameters:
 - Parameter-less Constructor
 - Parameterized Constructor
- Based on Pre-defined / User-defined:
 - Implicit Constructor / Default Constructor
 - o Explicit Constructor
- Based on Static
 - o Non-Static Constructor
 - Static Constructor