FACULTY OF ENGINEERING & TECHNOLOGY
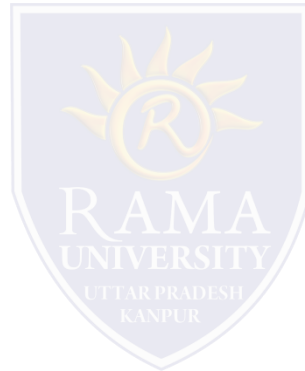
Brajesh Mishra

Assistant Professor
Department of Computer Science & Engineering
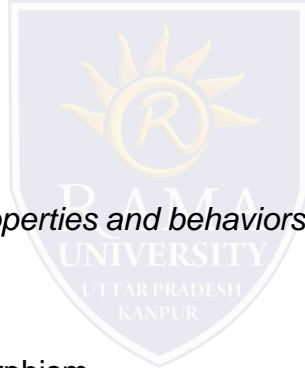
Class
Constructors

Class

- *Collection of objects* is called class.

- It is a logical entity.

- A class can also be defined as a blueprint from which you can create an individual object.

- Class doesn't consume any space.

- **Inheritance:**

  - *When one object acquires all the properties and behaviors of a parent object*, it is known as inheritance.

  - It provides code reusability.

 - It is used to achieve runtime polymorphism.

Class

A class can contain any of the following variable types.

Local variables − Variables defined inside methods, constructors or blocks are called local variables. The variable will be declared and initialized within the method and the variable will be destroyed when the method has completed.

Instance variables − Instance variables are variables within a class but outside any method. These variables are initialized when the class is instantiated. Instance variables can be accessed from inside any method, constructor or blocks of that particular class.

Class variables − Class variables are variables declared within a class, outside any method, with the static keyword.

A class can have any number of methods to access the value of various kinds of methods. Example, barking(), hungry() and sleeping() are methods.
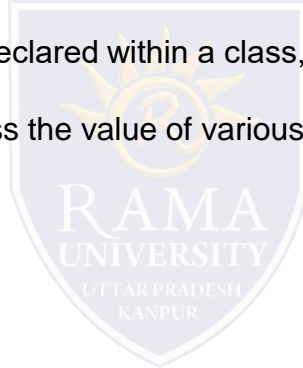
Constructors

 Every class has a constructor. If we do not explicitly write a constructor for a class, the Java compiler builds a default constructor for that class.
Each time a new object is created, at least one constructor will be invoked. The main rule of constructors is that they should have the same name as the class. A class can have more than one constructor.

```java
public class Puppy
{
public Puppy()
{
}
public Puppy(String name)
{ // This constructor has one parameter, name.
 }
}
```