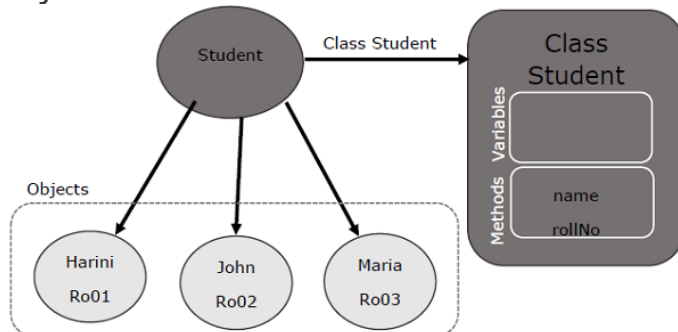# Classes & Objects:

Class is a blueprint for objects. Once define a class, using keyword **new** to create objects.



Student is class. Harini, John, Maria are objects. Name and rollNo are member variables.

## Extending a Class:

Two restrictions:
1. method overriding requires the **override** keyword
2. only the **primary** constructor can pass parameters to the base constructor.
Extending a class and inheriting all the features of a parent class is called **inheritance** but Scala allows the inheritance from just one class only.

## Implicit Classes :

Here implicit class is always in the object scope where all method definitions are allowed because implicit class cannot be a top level class.

- Implicit classes must be defined inside another class/object/trait (not in top level).
- Implicit classes may only take one non –implicit argument in their constructor.
- Implicit classes may not be any method, member or object in scope with the same name as the implicit class.

## Singleton Objects:

A singleton is a class that **can have only one instance**, like Object. You create singleton using the keyword **object** instead of class keyword. Since you can't instantiate a singleton object, you **can't pass parameters** to the primary constructor.