**Object** − Objects have states and behaviors. Example: A dog has states - color, name, breed as well as behaviors – wagging the tail, barking, eating. An object is an instance of a class

An object has three characteristics:

* **state:** represents data (value) of an object.
* **behavior:** represents the behavior (functionality) of an object such as deposit, withdraw etc.
* **identity:** Object identity is typically implemented via a unique ID.

**Instance variable in Java**

A variable which is created inside the class but outside the method, is known as instance variable. Instance variable doesn't get memory at compile time

Example

**public** **class** DemoClass {

**int** id=1;//field or data member or instance variable

String name="CDAC Jaipur";//field or data member or instance variable

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

DemoClass demoClass=**new** DemoClass();//Object Creation

System.***out***.println("Id is "+demoClass.id);///accessing member through reference variable

System.***out***.println("Name is "+demoClass.name);///accessing member through reference variable

}

}

Output

Id is 1

Name is CDAC Jaipur