Inheritance:

Inheritance is the mechanism of organizing and structuring program.

Objects are distinguished from each other by some additional features, but there are objects that share certain things common.

In Object oriented Programming classes can inherit some common behavior and state from others. Inheritance in OOP allows to define a class and later to organize some other classes simply adding some details with the old class definition.

In object oriented methodology, inheritance enables you to extend the functionally of an existing class. Create a class that inherits the attributes and behavior of another class. In addition, the new class can consist of a few new attributes and behavior that are specific to the class.

extends keyword: the extends keyword use to inherit the properties of another class.

public class alphabet{

}

publicclass smallAlpha extends alphabet {

}

public class capitalAlpha extends smallAlpha{

}

Invoking Super class Constructor:

If a class inherits properties of another class, then the sub class automatically acquires the properties of the super class. If you want to call parameterized constructor of super class, then we use Super keyword.

super(values);

Super and Subclasses:

In inheritance, a super class or parents class is the one form which another class inherit attributes and behavior. A subclass or child class is a class that inherits attributes and behavior from a super class.

Class: Super class

Air Ticket

Attribute

Date

Destination

Time

Class: Requested

Air Ticket

Attribute

Date

Destination

Time

Own attribute:-

Seat Number

Air Ticket

Attribute

Date

Destination

Time

Own Attribute:-

Status

Class: Confirmed

Sub Class

Super Class inherited by other Two classes :

Sub Class

Example:

class One {

int x, y;

}

class Two extends One {

public void set(int a, int b) {

x=a;

y=b;

}

public void show() {

System.*out*.print(x+ "\t" +y);

}

}

class UseInheritance {

public void main (String[] args) {

Two t=new Two ();

t.set (10, 20);

t.show();

}

}

Output :

10

20

Note: JAVA does not support multiple inheritance, This mean a class cannot extends more than one class. To Achieve Multiple Inheritance you have to use Interface.