

Class, Object and Packages in Java

Package OOPS;

```
Public class ClassObj {
```

```
Public void display() {
```

```
System.out.println("Hello, this is a method in ClassObj."); }
```

```
Public void show() { System.out.println("This is show method in ClassObj."); }
```

```
Public static void main(String[] args) {
```

```
//create an instance of ClassObj
```

```
ClassObj obj = new ClassObj();
```

```
Obj.display();
```

```
Obj.show();
```

```
}
```

```
}
```

Package OOPs;

```
Class Student {
```

```
// Data members
```

```
String name;
```

```
Int age;
```

```
// Parameterized Constructor
```

```

Student(String studentName, int studentAge) {

    Name = studentName;

    Age = studentAge;

}

// Method to display student details void display() { System.out.println("Age: "
+ age); }

System.out.println("Name: " + name);

Public static void main(String[] args) {

// Creating objects using parameterized constructors
Student s1 = new Student("Amit", 20);

Student s2 = new Student("Neha", 22);

Student s3 = new Student("Rohan", 21);

S1.display();

System.out.println("----");

S2.display();

System.out.println("----");

S3.display();
}

```

Addition of two numbers

```

Public class addconstructr {

```

```
Int a;
```

```
Int b;
```

```
Int sum;
```

```
Addconstructr (int num1, int num2) {
```

```
    A = num1;
```

```
    B = num2;
```

```
    Sum = a + b;
```

```
}
```

```
Void display() {
```

```
    |
```

```
    System.out.println("Sum: " + sum);
```

```
}
```

```
Run | Debug
```

```
Public static void main(String[] args) {
```

```
    Addconstructr obj = new addconstructr (num1:10, num2:20);
```

```
    Obj.display();
```

```
    }
```

```
}
```

```
//program for single Inheritance
```

```
Class Animal {
```

```
Void eat() { System.out.println("Animal is eating"); }
```

```
}
```

```
Class Cat extends Animal {
```

```
Void meow() {
```

```
System.out.println("Cat is meowing"); }
```

```
}
```

```
-----  
Public class SingleInheritance {
```

```
Public static void main(String[] args) {
```

```
//create the object of child class Animal a= new Animal();
```

```
a.eat();
```

```
//create the object of child class Cat c= new Cat();
```

```
c.meow();
```

```
// Program for Single Inheritance Example 2
```

```
Class Vehicle { void start() { System.out.println("Vehicle is starting"); }
```

```
}
```

```
Class Bike extends Vehicle {
```

```
Void ride() {
```

```
System.out.println("Bike is being ridden"); }
```

```
}
```

```
Public class SingleInheritance Example { public static void main(String[] args) {

// Create object of parent class Vehicle v = new Vehicle();

v.start();

// Create object of child class Bike b = new Bike();
-----
Class Grandmother {

Void cook() {

System.out.println("Grandmother can cook.");

}

}

Class Mother extends Grandmother {

Void sing() {

System.out.println("Mother can sing."); }

Class Saaili extends Mother {

Void dance() {

System.out.println("Saaili can dance.");

}

}

// Main class

Public class Main {
```

```
Public static void main(String[] args) {  
  
    Saaili s = new Saaili();  
  
    s.cook();  
  
    s.sing();  
  
    s.dance();  
  
}  
  
}  
Class one {  
  
    Void one1(){  
  
        System.out.println("Method one is parent");  
  
    }  
  
}  
  
Class Two extends one{  
  
    Void Two2(){  
  
        Super.one1();  
  
        System.out.println("Method Two is child  
        ");  
  
    }  
  
}
```

```
Class three extends one{  
  
Void three3(){  
  
Super.one1();  
  
System.out.println("Method Three is child"); }  
  
}
```

```
Public class Day6 {  
  
Public static void main(String[] args) {  
  
Two t1 = new Two();  
  
Three t2 = new three();  
  
T1.Two2();
```