PRACTICAL 2

# Objective

Create a class TwoDim which contains private members as x and y coordinates in package P1. Define the default constructor, a parameterized constructor and override toString() method to display the co-ordinates. Now reuse this class and in package P2 create another class ThreeDim, adding a new dimension as z as its private member. Define the constructors for the subclass and override toString() method in the subclass also. Write appropriate methods to show dynamic method dispatch. The main() function should be in a package P.

# Code

First package(p1)

package Dhruv\_Java**.**p1;

**public class** twodim {

**private int** x;

**private int** y;

**public** twodim(){ this.x=0; this.y=0;

}

**public** twodim(**int** x,**int** y){ this.x=x;

this.y=y;

}

**public** String toString(){

return ("Coordinates: x="+x+" y="+y);

}

}

# Second Package(p2)

package Dhruv\_Java**.**p2; import Dhruv\_Java**.**p1**.\***;

**public class** threedim **extends** twodim {

**private int** z;

**public** threedim() { super(0, 0);

this.z = 0;

}

**public** threedim(**int** x,**int** y,**int** z) { super(x, y);

this.z = z;

}

**public** String toString() {

return super.toString() + " z=" + z;

}

}

Main package(P)

package Dhruv\_Java**.**p; import java**.**util**.\***; import Dhruv\_Java**.**p1**.\***; import Dhruv\_Java**.**p2**.\***;

import Dhruv\_Java**.**p1**.**twodim;

**public class** assignment{

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

obj=new twodim(2,3); System.out.println(obj); obj=new threedim(2,3,6); System.out.println(obj);

}

}

# OUTPUT:-

