**EXPERIMENT – 4.2**

**AIM :** Create a class Box that uses a parameterized constructor to initialize the dimensions of a box. The dimensions of the Box are width, height, depth. The class should have a method that can return the volume of the box. Create an object of the Box class and test the functionalities.

**SOURCE CODE:**

class box{

static int height, weight, length;

box(int h,int w,int l){

height = h;

weigth = w;

length = l; }

public static int volume(){

return height\*length\*weigth; }

}

public class main{

public static void main(String[] args) {

box obj = new box(9,5,2);

int res = obj.volume();

System.out.println("The volume of the box is: "+res);}

}

**OUTPUT:**

**A picture containing text, font, screenshot, graphics

Description automatically generated**

**EXPERIMENT – 4.4**

**AIM :** WAP to display the use of this keyword.

**SOURCE CODE:**

class test{

static int side;

test(int s){

this.side = s;

}

public static void print(){

System.out.println("Initializing the side of the square using 'this' keyword = "+side); }

}

public class ThisKeyword{

public static void main(String[] args) {

test obj = new test(911);

obj.print();}

}

**OUTPUT:**



**EXPERIMENT – 4.1**

**AIM:** Write a program that can count the number of instances created for the class.

**SOURCE CODE:**

class test{

static int count = 0; {

count++; }

}

public class Instances{

public static void main(String[] args) {

test obj1 = new test();

test obj2 = new test();

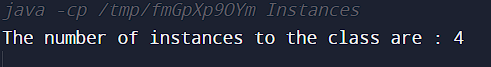
test obj3 = new test();

test obj4 = new test();

System.out.println("The number of instances to the class are : "+test.count);}

}

**OUTPUT:**

****

**EXPERIMENT – 4.3**

**AIM:** Java Program to get the cube of a given number using the static method.

**SOURCE CODE:**

class cubeOfNumber{

static int getCubeOfNumber(int n){

return n\*n\*n; }

}

public class Cube{

public static void main(String[] args) {

cubeOfNumber obj = new cubeOfNumber();

int res = obj.getCubeOfNumber(4);

System.out.println("Cube of the given number is : "+res);}

}

**OUTPUT:**

**A picture containing text, font, screenshot, typography

Description automatically generated**