Practical 5

import java.util.\*;

class shape

{

int side\_cube;

int l\_cub, b\_cub,h\_cub;

int r\_c,h\_c;

public shape(int a)

{

side\_cube=a;

l\_cub=-1; //for other values

r\_c=-1;

}

public shape(int l, int b, int h)

{

l\_cub=l;

b\_cub=b;

h\_cub=h;

side\_cube=-1;

r\_c =-1;

}

public shape(int r, int h)

{

r\_c=r;

h\_c=h;

side\_cube=-1;

l\_cub=-1;

}

public static void main(String args[])

{

shape cube= new shape(5);

shape cuboid= new shape(2,3,5);

shape cylinder= new shape(3,5);//random values assigned, values can be taken from user as well

volume(cube);

volume(cuboid);

volume(cylinder);

}

public static void volume(shape obj)

{

if(obj.side\_cube<0 && obj.r\_c<0)

{

System.out.println("Volume of the cuboid: "+(obj.l\_cub\*obj.b\_cub\*obj.h\_cub));

}

else if(obj.side\_cube<0 && obj.l\_cub<0)

{

System.out.println("Volume of the cylinder: "+(double)(3.14\*Math.pow(obj.r\_c,2)\*obj.h\_c));

}

else

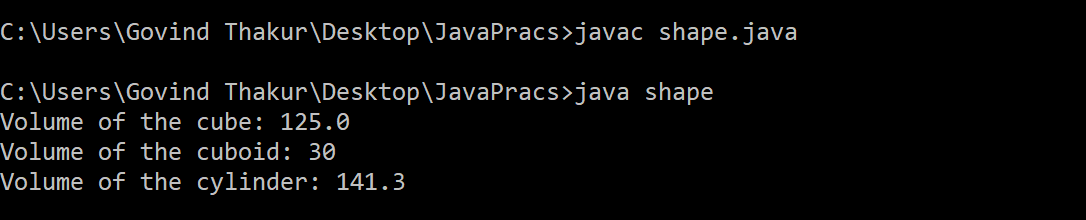
{

System.out.println("Volume of the cube: "+(Math.pow(obj.side\_cube,3)));

}

}

}

OUTPUT: