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**Batch:S2 RMCA B**

**Date:17/05/2022**

**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 10**

**Aim**

Area of different shapes using overloaded functions

**Procedure**

import java.util.\*;

class areaOverLoading{

private void area(int side){

int area= side\*side;

System.out.println("The area of square is "+area+"sqcm");

}

private void area(int length, int breadth){

int area= length\*breadth;

System.out.println("The area of rectangle is "+area+"sqcm");

}

private void area(double length, double breadth){

double area= (length\*breadth)/2;

System.out.println("The area of triangle is "+area+"sqcm");

}

private void area(double radius){

double area= 3.14\*radius\*radius;

System.out.println("The area of circle is "+area+"sqcm");

}

public static void main(String[] args){

Scanner sc= new Scanner(System.in);

int length1,breadth1,side;

double radius,length2,breadth2;

areaOverLoading area= new areaOverLoading();

System.out.println("\nChoose the Operations to perform:\n1. Area of square.\n2. Area of rectangle.\n3. Area of triangle.\n4. Area of circle.\n");

int ch= sc.nextInt();

switch(ch){

case 1:{

System.out.println("\nEnter the value of side of the square: ");

side= sc.nextInt();

area.area(side);

break;

}

case 2:{

System.out.println("\nEnter the value of length of the rectangle: ");

length1= sc.nextInt();

System.out.println("\nEnter the value of breadth of the rectangle: ");

breadth1= sc.nextInt();

area.area(length1, breadth1);

break;

}

case 3:{

System.out.println("\nEnter the value of base of the triangle: ");

length2= sc.nextDouble();

System.out.println("\nEnter the value of height of the rectangle: ");

breadth2= sc.nextDouble();

area.area(length2, breadth2);

break;

}

case 4:{

System.out.println("\nEnter the value of radius of the circle: ");

radius= sc.nextDouble();

area.area(radius);

break;

}

}

}

}

**Output Screenshot**