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**1.Calculate the area of a circle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the area of a circle:");

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

double a = 3.14\*r\*r;

System.out.println("The area is: " +a);

}

}

**2.Calculate the perimeter of a circle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the perimeter of a circle:");

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

double p = 2\*3.14\*r;

System.out.println("The perimeter is: " +p);

}

}

**3.Calculate the area of triangle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the area of triangle:");

System.out.println("b=");

Scanner b1 = new Scanner(System.in);

double b = b1.nextDouble();

System.out.println("h=");

Scanner h1 = new Scanner(System.in);

double h = h1.nextDouble();

double a = 0.5\*b\*h;

System.out.println("The area is:"+a);

}

}

**4.Calculate the area of a rectangle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the area of a rectangle:");

System.out.println("L=");

Scanner L1 = new Scanner(System.in);

double L = L1.nextDouble();

System.out.println("w=");

Scanner w1 = new Scanner(System.in);

double w = w1.nextDouble();

double a = L\*w;

System.out.println("The area is: " +a);

}

}

**5.Calculate the perimeter of rectangle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the perimeter of rectangle:");

System.out.println("L=");

Scanner L1 = new Scanner(System.in);

double L = L1.nextDouble();

System.out.println("w=");

Scanner w1 = new Scanner(System.in);

double w = w1.nextDouble();

double p = 2\*(L+w);

System.out.println("The perimeter is: " +p);

}

}

**6.Calculate the volume of cylinder:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the volume of cylinder:");

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

System.out.println("h=");

Scanner h1 = new Scanner(System.in);

double h = h1.nextDouble();

double v = 3.14\*r\*r\*h;

System.out.println("The volume is: " +v);

}

}

**7.Calculate the area of a parallelogram:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the area of a parallelogram:");

System.out.println("b=");

Scanner b1 = new Scanner(System.in);

double b = b1.nextDouble();

System.out.println("h=");

Scanner h1 = new Scanner(System.in);

double h = h1.nextDouble();

double a = b\*h;

System.out.println("The area is: " +a);

}

}

**8.Calculate the hypotenuse of a right-angled triangle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the hypotenuse of a right-angled triangle:");

System.out.println("a=");

Scanner a1 = new Scanner(System.in);

double a = a1.nextDouble();

System.out.println("b=");

Scanner b1 = new Scanner(System.in);

double b = b1.nextDouble();

double h = Math.sqrt(Math.pow(a,2)+Math.pow(b,2));

System.out.println("The hypotenuse is:"+h);

}

}

**9.Convert temperature from Celsius to Fahrenheit:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Convert temperature from Celsius to Fahrenheit:");

System.out.println("c=");

Scanner c1 = new Scanner(System.in);

double c = c1.nextDouble();

double f = c\*9/5-32;

System.out.println("The temperature of Fahrenheit is:"+f);

}

}

**10.Convert temperature from Fahrenheit to Celsius:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Convert temperature from Fahrenheit to Celsius:");

System.out.println("f=");

Scanner f1 = new Scanner(System.in);

double f = f1.nextDouble();

double c = (f-32)\*5/9;

System.out.println("The temperature of Celsius is:"+c);

}

}

**11. Calculate simple interest:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate simple interest:");

System.out.println("p=");

Scanner p1 = new Scanner(System.in);

double p = p1.nextDouble();

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

System.out.println("t=");

Scanner t1 = new Scanner(System.in);

double t = t1.nextDouble();

double SI = (p\*r\*t)/100;

System.out.println("The simple interest is:"+SI);

}

}

**12. Calculate compound interest:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate compound interest:");

System.out.println("p=");

Scanner p1 = new Scanner(System.in);

double p = p1.nextDouble();

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

System.out.println("n=");

Scanner n1 = new Scanner(System.in);

double n = n1.nextDouble();

System.out.println("t=");

Scanner t1 = new Scanner(System.in);

double t = t1.nextDouble();

double ci= p\*Math.pow((1+r/n),n\*t);

System.out.println("The compound interest is:"+ci);

}

}

**13. Calculate the surface area of a sphere:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the surface area of a sphere:");

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

double a = 4\*3.14\*r\*r;

System.out.println("The area is:"+a);

}

}

**14. Calculate the volume of a sphere:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the volume of a sphere:");

System.out.println("r=");

Scanner r1 = new Scanner(System.in);

double r = r1.nextDouble();

double v = 1.3333\*3.14\*Math.pow(r,3);

System.out.println("The volume is:"+v);

}

}

**15. Calculate the area of a trapezoid:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the area of a trapezoid:");

System.out.println("a=");

Scanner a1 = new Scanner(System.in);

double a = a1.nextDouble();

System.out.println("b=");

Scanner b1 = new Scanner(System.in);

double b = b1.nextDouble();

System.out.println("h=");

Scanner h1 = new Scanner(System.in);

double h = h1.nextDouble();

double A = 0.5\*(a+b)\*h;

System.out.println("The volume is:"+A);

}

}

**16. Calculate the perimeter of a triangle:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate the perimeter of a triangle:");

System.out.println("a=");

Scanner a1 = new Scanner(System.in);

double a = a1.nextDouble();

System.out.println("b=");

Scanner b1 = new Scanner(System.in);

double b = b1.nextDouble();

System.out.println("c=");

Scanner c1 = new Scanner(System.in);

double c = c1.nextDouble();

double p = a+b+c;

System.out.println("The perimeter is:"+p);

}

}

**17. Find the average of five numbers:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Find the average of five numbers:");

System.out.println("a=");

Scanner a1 = new Scanner(System.in);

double a = a1.nextDouble();

System.out.println("b=");

Scanner b1 = new Scanner(System.in);

double b = b1.nextDouble();

System.out.println("c=");

Scanner c1 = new Scanner(System.in);

double c = c1.nextDouble();

System.out.println("d=");

Scanner d1 = new Scanner(System.in);

double d = d1.nextDouble();

System.out.println("e=");

Scanner e1 = new Scanner(System.in);

double e = e1.nextDouble();

double A = (a+b+c+d+e)/5;

System.out.println("The average is:"+A);

}

}

**18. Calculate distance between two point:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Calculate distance between two point:");

System.out.println("x1=");

Scanner X1 = new Scanner(System.in);

double x1 = X1.nextDouble();

System.out.println("x2=");

Scanner X2 = new Scanner(System.in);

double x2 = X2.nextDouble();

System.out.println("y1=");

Scanner Y1 = new Scanner(System.in);

double y1 = Y1.nextDouble();

System.out.println("y2=");

Scanner Y2 = new Scanner(System.in);

double y2 = Y2.nextDouble();

double d = Math.sqrt(Math.pow(x2-x1,2)+Math.pow(y2-y1,2));

System.out.println("The distance between two point is:"+d);

}

}

**19. Convert Kilometers to Miles:**

package homework;

import java.util.Scanner;

public class Homework {

public static void main(String[] args) {

System.out.println("Convert Kilometers to Miles:");

System.out.println("K=");

Scanner K1 = new Scanner(System.in);

double K = K1.nextDouble();

double M = 0.6213\*K;

System.out.println("Convert Kilometers to Miles:"+M);

}

}