Q\_01

Code

package Q1;  
  
public class Question\_1 {  
 public static void main(String[] args) {  
  
 double A=2.0;  
 double B=3.0;  
 double C=4.0;  
 double X=5.0;  
 double Y=6.0;  
 double r=7.0;  
  
 //a. The square root of B\*B + 4AC  
 double square\_rt = Math.sqrt(B \* B + 4 \* A \* C);  
 System.out.println("a.The square root of B² + 4AC: " + square\_rt);  
  
 // b. The square root of X + 4Y\*Y\*Y  
 double squart = Math.sqrt(X + 4 \* Math.pow(Y, 3));  
 System.out.println("b.The square root of X + 4Y³: " + squart);  
  
 // c. The cube root of the product of X and Y  
 double cube\_root = Math.pow(X \* Y, 1.0/3.0);  
 System.out.println("c.The cube root of the product of X and Y: " + cube\_root);  
  
 // d. The area of a circle  
 double area = Math.PI \* r \* r;  
 System.out.println("d.The area of the circle is: " + area);  
  
  
  
  
  
  
 }  
}

Output

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AI-generated content may be incorrect.**

Q\_02

Code

package Q2;  
import java.util.\*;  
  
public class Question\_2 {  
  
 public static void main(String[] args) {  
  
 Scanner scanner = new Scanner(System.in);  
 System.out.println("Enter centimeter value:-");  
 double centimeter = scanner.nextDouble();  
  
 double CmtoInch = 2.54;  
 double Inchtofoot = 12;  
  
 double Cminch = centimeter/CmtoInch;  
 double InchFoot = Cminch/Inchtofoot;  
  
 System.out.println(centimeter + "to inch is : " + Cminch + " and To Foot is : " + InchFoot );  
 }  
}

Output

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AI-generated content may be incorrect.**

Q\_03

Code

package Q3;  
  
import java.util.\*;  
  
public class Question\_3 {  
 public static void main(String[] args) {  
  
 Scanner scanner= new Scanner(System.in);  
 System.out.println("Enter Temperature in degrees celsius:-");  
 double celsius=scanner.nextDouble();  
  
 double Fahrenheit=(1.8\*celsius)+32;  
  
 System.out.println(celsius +"to Farenheit is:- " + Fahrenheit);  
 }  
}

Output

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Q\_04

Code

package Q4;  
  
import java.util.\*;  
  
public class Question\_4 {  
 public static void main(String[] args) {  
  
 Scanner scanner=new Scanner(System.in);  
 System.out.println("Enter Your Body Weight:-");  
 double bodyweight=scanner.nextDouble();  
  
 double calories=bodyweight\*19;  
  
 System.out.println("A Person needs "+calories +" Calories for his "+ bodyweight +" KG Body weight");  
 }  
}

Output

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Q\_05

Code

package Q5;  
  
import java.util.\*;  
  
public class Question\_5 {  
 public static void main(String[] args) {  
  
 Scanner scanner= new Scanner(System.in);  
 System.out.println("Enter Temperature in degrees Fahrenheit:-");  
 double Fahrenheit=scanner.nextDouble();  
  
 double celsius=((double) 5 /9)\*(Fahrenheit-32);  
  
 System.out.println(Fahrenheit +"to Celsius is:- " + celsius);  
 }  
}

Output

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Q\_06

Code

package Q6;  
import java.util.\*;  
import java.time.Year;  
  
public class Question\_6 {  
  
 public static void main(String[] args) {  
 Scanner scanner=new Scanner(System.in);  
 System.out.println("Enter a year:- ");  
 int Byear=scanner.nextInt();  
  
 int currentyear=Year.now().getValue();  
  
 System.out.println("You were Born in " + Byear + " and will be "+ (currentyear-Byear) + " This year");  
 }  
}

Output

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Q\_07

Code

package Q7;  
  
import java.util.\*;  
  
public class Question\_7 {  
 public static void main(String[] args) {  
 Scanner scanner=new Scanner(System.in);  
 System.out.println("Enter your weight:- ");  
 int w= scanner.nextInt();  
 System.out.println("Enter your height:- ");  
 int h= scanner.nextInt();  
  
 double formula=(double) h/100.0;  
 double BMI=(double) w / (formula\*formula);  
  
 System.out.println("Your BMI IS "+ BMI);  
  
 }  
}

Output

**A screen shot of a computer

AI-generated content may be incorrect.**

Q\_08

Code

package Q8;  
import java.util.\*;  
  
public class Question\_8 {  
 public static void main(String[] args) {  
  
 Scanner scanner = new Scanner(System.in);  
 System.out.print("Enter the p: ");  
 double radius = scanner.nextDouble();  
  
  
 final double PI=3.14;  
  
 double volume=(4.0/3.0)\* (PI \*(radius\*radius\*radius));  
  
 System.out.println("The Volume is " + volume);  
 }  
}

Output

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Q\_09

Code

package Q9;  
import java.util.\*;  
  
public class Question\_9 {  
 public static void main(String[] args) {  
  
 Scanner scanner = new Scanner(System.in);  
  
 System.out.println("ENTER dollars:-");  
 double P=scanner.nextDouble();  
  
 System.out.println("ENTER Years:-");  
 double N=scanner.nextDouble();  
  
 System.out.println("ENTER Percentage:-");  
 double R=scanner.nextDouble();  
  
 double Investment = P\*Math.pow((1+(R/100)),N);  
  
 System.out.println(" Money earned after N years :- " + Investment);  
 }  
}

Output

**A computer screen with white text

AI-generated content may be incorrect.**

Q\_10

Code

package Q10;  
  
import java.util.\*;  
  
public class Question\_10 {  
 public static void main(String[] args) {  
  
 int monthsinyear=12;  
  
 Scanner scanner = new Scanner(System.in);  
  
 System.out.println("Loan amount:-");  
 double loan\_amount=scanner.nextDouble();  
  
 System.out.println("annual interest rate:-");  
 double annual\_interest\_rate=scanner.nextDouble();  
  
 System.out.println("loan period:-");  
 double loan\_period=scanner.nextDouble();  
  
 double monthlyinterestrate=annual\_interest\_rate/100.0/monthsinyear;  
 double numberofpayments=loan\_period\*monthsinyear;  
 double monthlypayment=(loan\_amount\*monthlyinterestrate)/(1-Math.pow(1/(1+monthlyinterestrate),numberofpayments));  
 double totalpayment=monthlypayment\*numberofpayments;  
  
 System.out.println("Monthly interest rate is :- " + monthlyinterestrate +"%");  
 System.out.println("Number of payments is :- " + numberofpayments );  
 System.out.println("Monthly Payment is :- " + monthlypayment +" rupees");  
 System.out.println("Total payment is :- " + totalpayment +" rupees");  
  
  
  
 }  
}

Output

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