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| Q\_01 | package Q\_01;  import java.lang.Math;  public class JavaExpressions {  public static void main(String[] args) {  int A = 5;  int B = 10;  int C = 2;  int X = 20;  int Y = 5;  int R = 7;  final double Pi = 3.14;  System.*out*.println("a. " + Math.*sqrt*((B \* B) - 4 \* A \* C));  System.*out*.println("b. " + Math.*sqrt*(X + 4 \* (Y \* Y \* Y)));  System.*out*.println("c. " + Math.*cbrt*(X\*Y));  System.*out*.println("d. " + Pi\*R\*R);  } } |
| Q\_02 | package Q\_02; import java.util.Scanner; public class UnitConv {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter the value in inches : ");  double inches = scan.nextDouble();  double cm = inches \* 2.54;  System.*out*.println(inches + " inches --> " + cm + " cm.");  } } |
| Q\_03 | package Q\_03; import java.util.Scanner; public class TempConv {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter the value in Temperature (°C): ");  double celsius = scan.nextDouble();  double fahrenheit = (celsius \* 1.8) + 32;  System.*out*.println(celsius + "°C --> " + String.*format*("%.2f" ,fahrenheit) + "°F");  } } |
| Q\_04 | package Q\_04; import java.util.Scanner; public class CalCalories {  public static void main(String[] args) {  Scanner reader = new Scanner(System.*in*);  System.*out*.print("Enter Your Weight (pound): ");  double pound = reader.nextDouble();  double calories = pound \* 19;  System.*out*.println("You Need to " + calories + " calories per day.");  } } |
| Q\_05 | package Q\_05; import java.util.Scanner; public class FahrenheitToCel {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter the value in Temperature (°F): ");  double fahrenheit = scan.nextDouble();  double celsius = (fahrenheit - 32) \* 5/9;  System.*out*.println(String.*format*("%.2f°F --> %.2f°C", fahrenheit, celsius));  } } |
| Q\_06 | package Q\_06; import java.util.Scanner; import java.time.Year; public class AgeCounter {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter Your born Year: ");  int birthYear = scan.nextInt();  int CurrentYear = Year.*now*().getValue();  int age = CurrentYear - birthYear;  System.*out*.println("You were born in " + birthYear + " and will be (are) " + age + " this year.");  } } |
| Q\_07 | package Q\_07; import java.util.Scanner; public class BMI {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter your weight in kg: ");  int weight = scan.nextInt();  System.*out*.print("Enter your height in cm: ");  int height = scan.nextInt();  double bmi = weight / Math.*pow*(height / 100.0, 2);  System.*out*.println("Your BMI is: " + String.*format*("%.2f", bmi));  if (bmi < 18.5) {  System.*out*.println("Your weight is low.");  } else if (bmi < 25) {  System.*out*.println("You are normal.");  } else if (bmi < 30) {  System.*out*.println("Your weight is high.");  } else {  System.*out*.println("You are obese.");  }  } } |
| Q\_08 | package Q\_08; import java.util.Scanner; public class VolumeOfSphere {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter the radius of the Sphere: ");  double radius = scan.nextDouble();  double PI = 3.14;  double volume = (4.0/3.0) \* PI \* Math.*pow*(radius, 3);  System.*out*.println("The Volume of the Sphere is: " + String.*format*("%.2f", volume));  } } |
| Q\_09 | package Q\_09; import java.util.Scanner; public class InvestmentGrow {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter the amount of investment: ");  double investment = scan.nextDouble();  System.*out*.print("Enter the annual interest rate in percentage: ");  double rate = scan.nextDouble();  System.*out*.print("Enter the number of years: ");  int years = scan.nextInt();  double InvestmentGrows = investment \* Math.*pow*((1 + rate / 1200), years \* 12);  System.*out*.println("The Investment value after " + years + " years is: " + String.*format*("%.2f", InvestmentGrows) + "$");  } } |
| Q\_10 | package Q\_10; import java.util.Scanner; public class LoanCal {  public static void main(String[] args) {  Scanner scan = new Scanner(System.*in*);  System.*out*.print("Enter Loan Amount: ");  double loan = scan.nextDouble();  System.*out*.print("Enter Annual Interest Rate: ");  double rate = scan.nextDouble();  System.*out*.print("Enter Loan Period (year): ");  double period = scan.nextInt();  double monthInerestRate = rate/100.0/12;  double noOfPayment = period \* 12;  double monthPayment = (loan \* monthInerestRate)/(1-Math.*pow*(1/(1+monthInerestRate),noOfPayment));  double totalPayment = monthPayment \* noOfPayment;  System.*out*.println("Monthly Payment: Rs:" + String.*format*("%.2f",monthPayment));  System.*out*.println("Annual Payment: Rs:" + String.*format*("%.2f",totalPayment));  } } |
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