Coding Assignment

Q1.Write a program to input length and width of a rectangle and find area of the given rectangle. How to calculate area of a rectangle in programming. Logic to find area of a rectangle whose length and width are given in programming.

Ans:

```
package WiproDay1;

import java.util.Scanner;

public class Q1 {
   public static void main(String[] args) {
      Scanner sc= new Scanner(System.in);

      System.out.print("Enter length: ");
      int length = sc.nextInt();

      System.out.print("Enter width: ");
      int width = sc.nextInt();

      int area = length * width;

      System.out.println("Area of the rectangle: " + area + " sq. units");
   }
}
```

Example :

Input

Enter length: 5

Enter width: 10

Output

Area of the triangle = 50 sq. units

Q2.Write a program to input radius of a circle from user and find diameter, circumference and area of the circle. How to calculate diameter, circumference and area of a circle whose radius is given by user in programming. Logic to find diameter, circumference and area of a circle .

Ans:

```
package WiproDay1;

import java.util.Scanner;

public class Q2 {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);

      System.out.print("Enter radius: ");
      int radius = sc.nextInt();

      double diameter = 2 * radius;
```

```
        double circumference = 2 * Math.PI * radius;
        double area = Math.PI * radius * radius;

        System.out.println("Diameter = " + diameter + " units");
        System.out.println("Circumference = " + String.format("%.2f", circumference) + " units");
        System.out.println("Area = " + String.format("%.2f", area) + " sq. units");
    }
}
```

Example :
Input
Enter radius: 10
Output

Diameter = 20 units
Circumference = 62.79 units
Area = 314 sq. units

Q3.Write a program to input base and height of a triangle and find area of the given triangle. How to find area of a triangle in programming. Logic to find area of a triangle in program.

Ans:

```
package WiproDay1;

import java.util.Scanner;

public class Q3 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter base of the triangle: ");
        int base = sc.nextInt();

        System.out.print("Enter height of the triangle: ");
        int height = sc.nextInt();

        double area = 0.5 * base * height;

        System.out.println("Area of the triangle = " + area + " sq. units");
    }
}
```

Apply formula to convert the temperature to Fahrenheit i.e. fahrenheit = (celsius * 9 / 5) + 32.

Example:
Input
Enter base of the triangle: 10
Enter height of the triangle: 15
Output

Area of the triangle = 75 sq. units

Q4.Write a program to input length in centimeter and convert it to meter and kilometer. How to convert length from centimeter to meter and kilometer in programming. Length conversion program from centimeter to meter and centimeter to kilometer.

Ans :

```
package WiproDay1;

import java.util.Scanner;

public class Q4 {
   public static void main(String[] args) {
      Scanner sc= new Scanner(System.in);

      System.out.print("Enter length in centimeter: ");
      int centimeter = sc.nextInt();

      double meter = centimeter / 100.0;
      double kilometer = centimeter / 100000.0;

      System.out.println("Length in meter = " + meter + " m");
      System.out.println("Length in kilometer = " + kilometer + " km");
   }
}
```

Example :
Input
Enter length in centimeter = 1000
Output

Length in meter = 10 m
Length in kilometer = 0.01 km

Required knowledge
Arithmetic operators, Data types, Variables and expressions, Basic input/output

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Length conversion formula
Centimeter to meter and centimeter to kilometer conversion formula is given by –
Centimeter to meter and kilometer formula
1m =100cm
1km=100000cm

Q5.Write a program to input any two numbers from user and swap values of both numbers.

Ans:

```
package WiproDay1;

import java.util.Scanner;

public class Q5 {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);

      System.out.print("Input first number: ");
      int num1 = sc.nextInt();

      System.out.print("Input second number: ");
      int num2 = sc.nextInt();

      int temp = num1;
      num1 = num2;
      num2 = temp;

      System.out.println("First number after swapping: " + num1);
      System.out.println("Second number after swapping: " + num2);
   }
}
```

Example:

Input
Input first number: 22
Input second number: 65
Output

First number after swapping: 65
Second number after swapping: 22

Q6.Write a program to input principle, time and rate (P, T, R) from user and find Simple Interest. How to calculate simple interest in C programming. Logic to find simple interest .

Coding Assignment

Ans:

```
package WiproDay1;

import java.util.Scanner;

public class Q6 {
   public static void main(String[] args) {
      Scanner sc= new Scanner(System.in);

      System.out.print("Enter principle: ");
      double principle = sc.nextDouble();

      System.out.print("Enter time: ");
      int time = sc.nextInt();

      System.out.print("Enter rate: ");
      double rate = sc.nextDouble();

      double simpleInterest = (principle * rate * time) / 100;

      System.out.println("Simple Interest = " + simpleInterest);
   }
}
```

in program.
Simple interest formula is given by.
Simple interest formula
si=(p*r*t)/100
Where,
P is the principle amount
T is the time and
R is the rate

Example :
Input
Enter principle: 1200
Enter time: 2
Enter rate: 5.4
Output

Simple Interest = 129.600006