

Swapnanil Dutta Roll 12

1.

Question: Write a program to print your name.

Code:

```
public class name{  
    public static void main(String[] args) {  
        System.out.println("Swapnanil Dutta");  
    }  
}
```

Output:

```
PS D:\OOPS-PCC-CS593\Day 1> javac name.java  
PS D:\OOPS-PCC-CS593\Day 1> java name  
Swapnanil Dutta
```

2.

Question: Write a program to read the price of an item in the decimal form (like 75.95) and print the output in paise (like 7595 paise).

Code:

```
public class ToPaisa {  
    public static void main(String[] args) {  
        double price = Double.parseDouble(args[0]);  
        System.out.println("Price: " + (int) (price * 100) + "  
Paise");  
    }  
}
```

Output:

```
PS D:\OOPS-PCC-CS593\Day 1> javac ToPaisa.java  
PS D:\OOPS-PCC-CS593\Day 1> java ToPaisa 70.89  
Price: 7089 Paise
```

3.

Question: Write a program to convert the given temperature in Fahrenheit to Celsius using the following conversion formula:

$$C = (F-32)/1.8$$

Code:

```
public class TempConvert{  
    public static void main(String[] args) {  
        double fahrenheit = Double.parseDouble(args[0]);  
        double celcius = (fahrenheit - 32) / 1.8;  
        System.out.println("Celcius: " + celcius);  
    }  
}
```

Output:

```
PS D:\OOPS-PCC-CS593\Day 1> javac TempConvert.java  
PS D:\OOPS-PCC-CS593\Day 1> java TempConvert 97.6  
Celcius: 36.44444444444444
```

4.

Question: Write a program to determine sum of the following series for given value of n: $(1 + 1/2 + 1/3 + + 1/n)$. Print the result up to two decimal places.

Code:

```
public class SumOfSeries {  
    public static void main(String[] args) {  
        int n = Integer.parseInt(args[0]);  
        double series = 0.0;  
        for (int i = 1; i <= n; i++)  
            series += 1.0 / i;  
        System.out.println("Series: " + String.format("%.2f",  
series));  
    }  
}
```

Output:

```
PS D:\OOPS-PCC-CS593\Day 1> javac SumOfSeries.java  
PS D:\OOPS-PCC-CS593\Day 1> java SumOfSeries 12  
Series: 3.10
```

5.

Question: Write a program to find the sum of digits and reverse of a given integer number (take input using command-line argument).

Code:

```
class Operations {
    int reverse(int n) {
        int rev = 0;
        int copy = n;
        while (copy != 0) {
            rev = rev * 10 + (copy % 10);
            copy /= 10;
        }
        return rev;
    }
    int sumOfDigits(int n) {
        int sum = 0;
        while (n != 0) {
            sum += n % 10;
            n /= 10;
        }
        return sum;
    }
}

public class SumAndRev{
    public static void main(String[] args) {
        int n = Integer.parseInt(args[0]);
        Operations obj = new Operations();
        System.out.println("Reverse: " + obj.reverse(n));
        System.out.println("Sum: " + obj.sumOfDigits(n));
    }
}
```

Output:

```
PS D:\OOPS-PCC-CS593\Day 1> javac SumAndRev.java
PS D:\OOPS-PCC-CS593\Day 1> java SumAndRev 136
Reverse: 631
Sum: 10
```

6.

Question: Write a program to find the factorial of a given integer number using recursion (take input using command-line argument).

Code:

```
public class Facto {  
    public static int facto(int n) {  
        if (n == 0)  
            return 1;  
        return n * facto(n - 1);  
    }  
    public static void main(String[] args) {  
        int n = Integer.parseInt(args[0]);  
        System.out.println("Factorial: " + facto(n));  
    }  
}
```

Output:

```
PS D:\OOPS-PCC-CS593\Day 1> javac Facto.java  
PS D:\OOPS-PCC-CS593\Day 1> java Facto 5  
Factorial: 120
```