**Experiment No. 1**

Name : Dnyanesh Agale

Class : TE E&TC (2025-26)

Subject : FJP

Roll No. : 1

import java.util.Scanner;

public class Experiment1 {

    public static long factorial(int n) {

        long fact = 1;

        for (int i = 1; i <= n; i++) {

            fact \*= i;

        }

        return fact;

    }

    public static void displayPrimes(int limit) {

        int count = 0, num = 2;

        while (count < limit) {

            boolean isPrime = true;

            for (int i = 2; i <= Math.sqrt(num); i++) {

                if (num % i == 0) {

                    isPrime = false;

                    break;

                }

            }

            if (isPrime) {

                System.out.print(num + " ");

                count++;

            }

            num++;

        }

        System.out.println();

    }

public static void sumAndAverage(int num) {

    int sum = 0, count = 0, temp = num;

    while (temp > 0) {

        sum =sum+ (temp % 10);

        temp =temp/ 10;

        count++;

    }

    double avg = (double) sum / count;

    System.out.println("Sum = " + sum);

    System.out.println("Average = " + avg);

}

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("number for factorial: ");

        int num = sc.nextInt();

        System.out.println("Factorial = " + factorial(num));

        System.out.println("50 prime numbers:");

        displayPrimes(50);

        System.out.println("enter the number for average");

        int b=sc.nextInt();

        sumAndAverage(b);

        sc.close();

    }

}

Output :

number for factorial: 3

Factorial = 6

50 prime numbers:

2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97 101 103 107 109 113 127 131 137 139 149 151 157 163 167 173 179 181 191 193 197 199 211 223 227 229

enter the number for average

56

Sum = 11

Average = 5.5