**C) Write a program to find Factorial of given no using  iterative and recursive algorithm.**

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import java.util.Scanner;

public class Factorial\_iterative\_recursive {

    public static long factorialIterative(int n) {

        if (n < 0) {

            return -1; // factorial is not define

        }

        long result = 1;

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

            result \*= i;

        }

        return result;

    }

    public static long factorialRecursive(int n)

    {

        if(n<0)

     {

        return -1;  // factorial is not define

     }

     if(n==0 || n==1)

     {

        return 1;

     }

     return n\*factorialRecursive(n-1);

    }

    public static void main(String[] args) {

        int n;

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the number ehich have factorial :");

        n = sc.nextInt();

        sc.close();

        long iterativeResult = factorialIterative(n);

        long recursiveResult = factorialRecursive(n);

        System.out.println("Factorial of "+ n +" using itrative method is " + iterativeResult);

         System.out.println("Factorial of "+ n +" using recursive method is " + recursiveResult);

    }

}

