

Task 1: Basic conditional statements and looping programs

Aim: To count the number of even and odd values among 5 given numbers

ALGORITHM:

1. Start
2. Initialize even = 0, odd = 0.
3. Read 5 integers
4. If number % 2 == 0, increment even
5. Else increment odd
6. Display results
7. Stop

PROGRAM

```
import java.util.Scanner;  
class EvenOddCount {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner (System.in);  
        int even = 0, odd = 0;  
        for (int i=0; i<5; i++) {  
            int num = sc.nextInt();  
            if (num % 2 == 0)  
                even++;  
            else  
                odd++;  
        }  
        System.out.println("Even=" + even);  
        System.out.println("Odd=" + odd);  
    }  
}
```

Result:- Thw, the number of even and odd elements counted successfully

1.2 sum of last digit of two given numbers

AIM: To find the sum of the last digits of two given numbers

ALGORITHM:

1. start
2. Read two integers
3. find last digit using modulo 10
4. Add both last digit.
5. display sum
6. stop

PROGRAM

```
import java.util.Scanner;  
class SumLastDigit{  
    public static void main(String[] args)  
{  
        Scanner sc = new  
Scanner(System.in);  
        int a = sc.nextInt();  
        int b = sc.nextInt();  
        int sum = (a%10) + (b%10);  
        System.out.println("sum of last digits = " + sum);  
    }  
}
```

RESULT: Thus, the sum of the last digits is
Obtained correctly.

Input

123 457

Output

sum of last digits = 10

1.3 To check whether a given number is prime

AIM: To check whether a given number is prime

ALGORITHM:

1. Start
2. Read integer n .
3. if $n < 1$, not prime
4. check divisibility from 2 to $n/2$
5. If divisible, not prime
6. else prime
7. stop

PROGRAM:

```
import java.util.Scanner  
class PrimeCheck{  
    public static void main (String[] args)  
{  
        Scanner sc = new  
        Scanner (System.in);  
        int n = sc.nextInt();  
        boolean isprime = true;  
        if (n <= 1)  
            isprime = false;  
        for (int i = 2; i <= n/2 && isprime; i++) {  
            if (n % i == 0)  
                isprime = false;  
        }  
        if (isprime)  
            System.out.println ("prime number");  
        else  
            System.out.println ("not prime");  
    }  
}
```

RESULT: Thus the given number is checked for primality successfully.

Input

13

Output

prime number

1.4 Factorial of n is the product of numbers from 1 to n.

PROBLEM: To find the factorial of a given number

ALGORITHM:

1. Start
2. Read integer n.
3. Initialize fact = 1
4. Multiply from 1 to n
5. Display factorial
6. Stop

PROGRAM

```
import java.util.Scanner;
class Factorial {
    public static void main(String[] args)
    {
        Scanner sc = new
        Scanner (System.in);
        int n = sc.nextInt();
        long fact = 1;
        for (int i = 1; i <= n; i++)
            fact = fact * i;
        System.out.println ("Factorial = " + fact);
    }
}
```

RESULT

Thus the factorial of the given number is calculated successfully.

understand what is happening around us.

Input

5

Output

Factorial = 120

CHARTS & PICTURES

FRAMES

AMPLITUDE

WAVE FORM OF A SIGNAL

PROBLEMS ON PHYSICAL WORLD

MINIMUM, MAXIMUM & MEAN

MINIMUM & MAXIMUM

MEAN & STANDARD DEVIATION

DATA

CHARTS & PICTURES

FRAMES, LIFE CYCLE PROGRAM

INTERPOLATION

(BASIC CONCEPT) NUMBER BIAS, GROWTH, DECAY

GROWTH - EXPONENTIAL

LINEAR & EXPONENTIAL

LINEAR & EXPONENTIAL

LINEAR & EXPONENTIAL

(LINEAR) P

LINEAR & EXPONENTIAL

LINEAR & EXPONENTIAL

(LINEAR) P

LINEAR & EXPONENTIAL

(EXPONENTIAL) P

LINEAR & EXPONENTIAL

(EXPONENTIAL) P

• FORMS OF EXPONENTIAL

• EXPONENTIAL FUNCTIONS

Input

6

Output

8

a capital loss

or profit - capital gain

more more gain

Minerals - geological

data

Market value

Excess, like new, trade

(gross profit) minus book value = profit

Profit = 32 million

(return type) minus

(market value) at fair

value = profit - loss

(fair value) - (fair value) net

(Profit + loss) = fair value -
fair value - fair value

it makes things difficult to determine - return

minerals - geological

1.5 Nth Fibonacci number

Aim: To find the Nth Fibonacci number

ALGORITHM:

1. Start
2. Read integer n.
3. Initialize a=0, b=1
4. Loop Until nth-term
5. Display the nth Fibonacci number
6. Stop

PROGRAM

```
import java.util.Scanner;  
class Fibonacci {  
    public static void main(String[] args)  
{  
        Scanner sc = new  
        Scanner(System.in);  
        int n = sc.nextInt();  
        int a = 0, b = 1, c;  
        if (n == 0)  
            System.out.println(a);  
        else if (n == 1)  
            System.out.println(b);  
        else {  
            for (int i = 2; i <= n; i++) {  
                c = a + b;  
                a = b;  
                b = c;  
            }  
            System.out.println(b);  
        }  
    }  
}
```

VEL TECH	
EX No.	1
PERFORMANCE (5)	8
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	3
RECORD (4)	4
TOTAL (15)	15
SIGN WITH DATE	03/03/2023

~~RESULT:- Thus the Nth Fibonacci number is generated successfully~~