**If , If –else**

1.Write a program to find maximum of two numbers. Using if-else

2.Input a number and display whether number is Even or Odd .

Using if-else

a.Using Arithmetic operator

b.Using bitwise operator

3.Write a program to find maximum of three numbers.

Using nested if-else

4.Write a program to check whether the given year is leap year or not and print the number of days in the given year.

[ LEAP YEAR FORMULA IS

if ( (y%4==0 && y%100!=0) || (y%400==0) ) y is LEAP YEAR

]

5.Write a program to reverse the case of given alphabet. Using if-else

6.Decide whether input character is vowel or not.

7.Decide whether the input character is (ASCII Table)

a.UPPERCASE alphabet ( ‘A’=65 ‘Z’ = 90)

b.LOWERCASE alphabet (‘a’ =90 ‘z’ = 122)

c.DIGIT (‘0’=48 ‘9’=56)

d.Special character

8.Write a program two accept two numbers and perform the division on two numbers. Check for divide by zero error. If the divider is zero then display the appropriate message else perform the division

9.Write a program to display number of days in the given month. Consider the leap year condition also

Input : month : 1 or 2 or 3 so on ……

Year : 2004

Output : number of days in given month \_\_\_\_ of \_\_\_\_year.

10.Write a program to check parity of given number.

**II.Switch Case:**

1.Input the number from the user Assume

1 RED

2GREEN

3BLUE

4BLACK

In output Print the corresponding color for given number

2.Write a program for four function calculator. For four functions +,-,\*,/

3.Write a program to display number of days in the given month. Consider the leap year condition also

Input : month : 1 or 2 or 3 so on ……

Year : 2004

Output : number of days in given month \_\_\_\_ of \_\_\_\_year.

**Loop:-**

**I.While loop**

1.Write a program to accept a character and a number, and print the character number times Input Character: \*

Number: 6

Output:

\*\*\*\*\*\*

2.Write a program to print table of given number.

Input: 9

Output:
9 x 1 = 9

9 x 2 = 18
9 x 3 = 27

.

.

…..

3.Write a program to accept a number and

a. Calculate sum of digits of integer

Input: 9362

Output: 2 + 6 + 3 + 9 = 20

b. Reverse the number

Input: 9362
Output: 2639

c. Check whether given number is numeric palindrome or not

Input: 9362

Output: 9362 is not a numeric palindrome

Input: 36963

Output: 36963 is a numeric palindrome

d. Check whether it is Armstrong no. (when sum of cube of all digits of equals the number then the number is called as Armstrong number) Example: 153(1 \* 1 \* 1)+(5 \* 5 \* 5)+(3 \* 3 \* 3) = 1 + 125 + 27 = 153 Input: 936

Output: 936 is not an Armstrong number

Input: 153

Output: 153 is an Armstrong number

4.Write a program to find factorial of given number. Input: 5

Output: 1 \* 2 \* 3 \* 4 \* 5 = 120

5.Write a program to find factorial of given number. Input: 5

Output: 5 \* 4 \* 3 \* 2 \* 1 = 120

6.Write a program to accept two numbers and find its GCD (greatest common divisor) using Euclidean algorithm. The following example explains the algorithm. GCD of 123 and 36 is 3

123 % 36 = 15

36 % 15 = 6

15 6 = 3

6 % 3 = 0

GCD = 3

Input: no1: 123 no2:36

GCD of 123 and 36 is 3

**II.For loop**

7.Write a program to print table of given number.

8.Write a program to find factorial of given number.

9.Write a program to accept integer values of base and index and calculate power of base to index.

Input: base: 2 index: 5

Output: 32

10.Write a program to display n: 1, 1, 2, 3, 5, 8

11.Write a program to accept a number and check whether it is Prime no.

12.Write a program to count the number of 1’s into a given number using bitwise operator

13.Write a program to display the number in binary format using

a. arithmetic operators

b. bitwise operators

**III.Do-while Loop**

14.Modify the menu driven program for four function calculator. Add a menu item to choose option exit. The program continues till user chooses option exit.

IV.Nested Loops

15.Print following pattern

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

16.Print following patterns

a)

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

b)

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

c)

5

5 4

5 4 3

5 4 3 2

5 4 3 2 1