**ASSIGNMENT-1**

**1) PSEUDOCODE**

BEGIN

NUMBER age

DISPLAY “Enter age”

IF age>=18

DISPLAY”Eligible for Voting!”

ELSE

DISPLAY “NOT Eligible for Voting!”

END IF

END

**2) ALGORITHM**

Step-1: Start

Step-2: Initialize variables num,flag=1,j=2

Step-3: Read number from user

Step-4: if num<=1 //num which is less than 1 is not a prime number

Display num is not a prime number

Goto step 7

Step-5: repeat the steps until j<[(n/2)+1]

5.1 If remainder of number divide j equals to 0,

Set flag=0

Goto step 6

5.2 j=j+1

Step-6: if flag==0,

Display num+ ”is not prime number”

Else

Display num+ ”n is prime number

Step-7: stop

**3) PSEUDOCODE**

BEGIN

OUTPUT ”Enter any number”

INPUT Number

Reverse=0

WHILE(Number>0) THEN

Remainder=Number%10

Reverse=(Reverse\*10) +Remainder

Number=Number //10

END WHILE

OUTPUT ”Reverse of entered number is =”+Reverse

END

**4) ALGORITHM**

Step-1:Declare N and F as integer variable

Step-2:Initialize F=1.

Step-3:Enter the value of N

Step-4:check whether N>0,if not then F=1

Step-5:If yes then,F=F\*N

Step-6:Decrease the value of N by 1

Step-7:Repeat step 4 and 5 until N=0

Step-8:Now print the value of F(The value of F will be the factorial on N(number)

**5) PSEUDOCODE**

BEGIN

STRING “CITIUSTECH”

NUMBER count=0;

For each of character in Sting{

If string.charAt(i)==’a’//

string.charAt(i)==’e’//

string.charAt(i)==’i’//

string.charAt(i)==’o’//

string.charAt(i)==’u’//{

count++

}}

DISPLAY”Total no of vowels in string are:”+count

**6) ALGORITHM-1**

Step-1: Start

Step-2: Enter age

Step-3: if age>=18, print ”you are eligible to vote” ,go to step 5

Step-4: if age<18, print ”you are not eligible to vote”

Step-5: stop

**6) ALGORITHM -3**

Step-1:Declare a variable n, reverse and remainder as integer;

Step-2:Read the number n;

Step-3:while n not equal to 0

{

Remainder=n%10;

Reverse=reverse\*10+remainder;

N=n/10;

}

Step-4:Print reverse

**6) ALGORITHM -5**

Step-1:start

Step-2:Declare a string CITIUSTECH,Integer count as 0;

Step-3:Using for to repeat all the characters in the string

Step-4:nested the IF condition to check the vowels like “a,e,i,o,u”

Step-5:After each vowel the count is increased

Step-6:Now print the count

**7) PSEUDOCODE-2**

BEGIN

INPUT n

i=2

answer=prime

WHILE i<=n/2

rem=n%i

IF rem is not equal to 0

i=i+1

ELSE

Answer=not prime

END WHILE LOOP

OUTPUT answer

END

**7) PSEUDOCODE-4**

BEGIN

INPUT number

SET factorial: =1, i: =1

WHILE i<=number DO COMPUTE factorial: =factorial\*i

INCREASE i by 1

END LOOP

PRINT factorial

END