1). Write a pseudocode to determine whether a person is eligible to vote or not given his/her age. The voting eligibility criteria is that the person’s age must be >= 18.

Pseudocode:

begin

int a

display ”ENTER THE NUMBER”

accept a

IF (a>=18)

Display “HE/SHE ELIGIBLE FOR VOTE”

ELSE

Display “ HE /SHE IS NOT ELIGIBLE FOR VOTE”

end

2). Write an algorithm to determine whether a number is a prime number or not.

ALGORITHM:

Step1: Start

Step2: declare variable a,i,m,flag

Step3: Read variable a,i,m=0,flag=0.

Step4: perform m=a/2

Step5: using for loop( taking variable i=2 ,condition (i<=m),increment i++)

If a%i==0

Display as Not a Prime Number

And assign as flag=1 and break

Step6: if Flag==0

Display as It is a Prime Number

Step7: Stop

3). Write a pseudocode to reverse the digits of a number.

Pseudo Code:

Begin

Enter the number

process the input

declare variable "remainder"

initialize reverse variable to zero

iterate while loop until number is not equal to zero

assign mod 10 of number to remainder

assign reverse\*10+remainder to reverse variable

assign number divided by 10 value to number variable

Display reverse number

End

4). Write an algorithm to find the factorial of a given number

ALGORITHM:

Step1: Start

Step2: input the value

Step3: process the input

Step4: initialize variable "fact" and "i" equal to 1

Step5: use for loop until the condition satisfy i<=number

Step6: calculate fact=fact\*i

Step7: end of for loop

Step8: Display the factorial of the number

Step9: stop

5). Write a pseudocode to count the number of vowels in the string CITIUSTECH.

PseudoCode:

Begin

initialize vowel is eqaul to "aeiou AEIOU"

assign String is equal to CITIUSTECH

initialize count is equal to zero

check any vowel is present in String

if yes increment count

print count which is the total number of vowels in String

end

6).Write an algorithm for each pseudocode written in assignment 1, 3 and 5

1)

ALGORITHM:

Step1: Start

Step2: Declare variable a.

Step3: Read variable a.

Step4: if a>=18

Display he/she is eligible to vote

Else

Display he/she is not eligible to vote

Step5: Stop

3)

ALGORITHM:

START

Step1: Ask the user to enter any number

Step2: Declare and initialize another variable reversed with 0,where reversed an integer varaiable.

Step3: Get the last digit of the given number by performing the modulo division(%) and store the last variable, likely last=number%10

Step4: Multiply reversed by 10 ad last, like reversed=reversed\*10+last

Step5: Divide numbered by 10, like numbered/10

Step6: Repeat the step3to5 till numbered is not equal to (or greater than )zero.

STOP

5)

ALGORITHM:

Step1: Initialize the variables

Step2: Accept the input

Step3: Initialize for loop

Step4: Check and Count the vowels

Step5: Terminate the loop

Step6: print total count

7). Write a pseudocode for each algorithm written in assignment 2, 4.

2)

Pseudocode:

Begin

Int a,i,m=0,flag=0

Display”ENTER THE NUMBER”

Accept a

m=a/2

for(i=2,i<=m,i++)

if(a%i==0)

Display(“Not a Prime Number”)

Flag=1

Break the loop

If(flag==0)

Display(“It is a Prime Number”)

End

4)

Begin

Declare N and F as integer variables

Initialise F=1

Enter the value N

Check whether N>0,if not then F=1.

If yes then,F=F\*N

Decrease the value of N by 1

Repeat step 4 and 5 until N=0.

Now print the value of F

End