Lab task (pseudo coding)

01#

START

INPUT number

REMAINDER = number%5

IF REMAINDER = 0 THEN

PRINT “The number is multiple of 5”

ELSE

PRINT “The number is not a multiple of 5”

END

02#

START

INPUT character

IF character is ≤ Z and character is ≥ A THEN

PRINT “The character is uppercase”

ELSEIF

Character is ≤ z and character is ≤ a THEN

PRINT “The character is lowercase”

ELSE

PRINT “The character is not a alphabet”

ENDIF

END

03#

START

INPUT number1

INPUT number2

INPUT operation( +, \* )

IF operation is “+”

SET result = number1 + number2

ELSEIF operation is “ \* “

SET resullt=number1 \* number2

ELSE

SET result=operation invalid

ENDIF

PRINT “result”

END

04#

START

INPUT number

IF number is ﹥ 0 THEN

PRINT “The number is positive”

ELSEIF number is ﹤ 0 THEN

PRINT “The number is negative”

ELSEIF number is = 0 THEN

PRINT “The number is zero”

ENDIF

END

05#

START

INPUT Person’s age

IF 13 ≤ Person’s age ≤ 19 THEN

PRINT “The Person is a teenager”

ELSE

PRINT “The Person is not a teenager”

END

Lab task (algorithm)

1.Ask the user to enter year

2.If the year is divisible by four and not divisible by 100 then it is a leap year

3.Else if the year is divisible by 400 then it is a leap year

4.Else the year is not a leap year

5.Show results to the user

02

1. Initialise array of 256 values having value 0
2. Take a input string from user
3. Iterate through each character in string

4- for each character increment its corresponding count in the array

5. After processing string loop through array and print characters having non-zero count

03

1. Take the value of x and y from the user

2.If y=0 then display result=1

3.Else multiply y times the number of x.

4.Display results to the user

04

1. Ask the user to enter radius

2. Area of circle=pie\*radius\*radius (pie=3.14)

3. Display area of circle to the user

05

Since median is calculated as middle number incase of odd amount of numbers are given or average of two middle numbers incase of even amount of numbers are given.Here we have assumed the amount of numbers will be odd since question mentions there will always be three numbers.

1. Take number1,number2,number3 inputs from the user
2. Arrange the given numbers in ascending order
3. Median=middle number in the sequence
4. Show the median to the user