Lab 02

Lab Tasks 1

TASK 1:

```
START
INPUT number
IF number MOD 5 = 0 THEN
        PRINT “number is a multiple of 5”
ELSE
        PRINT “number is not a multiple of 5”
END
```

TASK 2:

```
START
INPUT character
IF character >= ‘A’ and character <= ‘Z’ THEN
        PRINT “character is uppercase”
ELSE
        IF character >= ‘a’ and character <= ‘z’ THEN
                PRINT “character is lowercase”
        ELSE
                PRINT “character is not a letter”
END
```

TASK 3:

```
START
INPUT number1
INPUT number2
INPUT operator
IF operator = “+” THEN
        PRINT number1 + number2
ELSE
        IF operator = “*” THEN
                PRINT number1 * number2
        ELSE
                PRINT “Invalid operator”
END
```

TASK 4:

```
START
INPUT number
IF number > 0 THEN
        PRINT “number is positive”
ELSE
        IF number < 0 THEN
                PRINT “number is negative”
        ELSE
                PRINT “number is zero”
END
```

TASK 5:

START

INPUT age

IF age >= 13 and age <= 19 THEN

    PRINT “The person is a teenager”

ELSE

    PRINT “The person is not a teenager”

END

Lab Tasks 2

TASK 1:

1. Ask the user to enter year
2. Set a to (year / 4)
3. Set b to (year / 100)
4. Set c to (year / 400)
5. If a is a whole number and b is not a whole number or if c is a whole number display “this year is a leap year”
6. Otherwise display “this year is not a leap year”

TASK 2:

1. Ask the user to enter a string
2. Set count to total number of occurrences of a character
3. Display the count to the user
4. Do this for each unique character in the string

TASK 3:

1. Ask the user to enter number base
2. Ask the user to enter number exponent
3. Set answer to base*base(exponent-1 number of times)
4. Display answer to the user

TASK 4:

1. Ask the user to enter radius
2. Set Area to (3.142 * radius * radius)
3. Display Area to the user

TASK 5:

1. Ask the user to enter number1
2. Ask the user to enter number2
3. Ask the user to enter number3
4. Arrange the numbers in ascending order from smallest to largest
5. Display the middle value to the user