Lab Task 1:

READ Order

IS

STOCK

?

TRUE FALSE

READ Payment

OUTPUT “Stock not available”

Is Payment

?

F TRUE

READ Payment

OUTPUT “No Payment”

END

**PSUEDOCODE**

**Q. Finding if the number is multiple of 5.**

START

INPUT Number

IF Number MOD 5 = 0 THEN

OUTPUT “Number is a multiple of 5”

ELSE

OUTPUT “Not a multiple”

END

**Q. Checking if character is uppercase or lowercase.**

START

INPUT Character

IF Character >= ‘a’ OR Character <= ‘z’ THEN

OUTPUT “Char is lowercase”

ELSE

OUTPUT “Lowercase”

END

**Q. Creating a small calculator.**

START

INPUT Number1, Number2

INPUT Operator

IF Operator = ‘+’ THEN

Answer = Number1 + Number2

ELSEIF Operator = ‘\*’ THEN

Answer = Number1 \* Number2

ELSE

OUTPUT “Operator is invalid”

END

**Q. Checking the nature of a number.**

START

INPUT Number

IF Number > 0 THEN

OUTPUT “Number is positive”

ELSEIF Number < 0 THEN

OUTPUT “Number is negative”

ELSE

OUTPUT “Number is 0”

END

**Q. Checking for a teenager.**

START

INPUT Number

IF Number > 13 AND Number < 19 THEN

OUTPUT “You are a teenager”

ELSE

OUTPUT “Not a teenager”

END

**ALGORITHMS**

**Q. Checking if a given year is a leap year.**

1. Input Year.
2. If it is divisible by 4, go to step 3.
3. If it is not divisible by 100, go to step 4.
4. If it is divisible by 400, go to step 5.
5. Print “It is a leap year”

**Q. Number of occurrences of each character.**

1. Enter the character.
2. Declare an array of 26 columns for each character.
3. Use MID function to separate each character and read the first one.
4. Increase count of the relevant column in the array.
5. Repeat until string is finished.
6. Print all the columns of the array.

**Q. Calculating x to the power of y (xy).**

1. Enter the variable x.
2. Enter the variable y.
3. Put y in a separate variable Count.
4. Start a repeat until loop until Count.
5. Multiply x by itself and repeat until Count.
6. Store answer in a variable ‘Ans’.
7. Print ‘Ans’.

**Q. Area of a circle given it’s radius.**

1. Enter the radius r.
2. Set Area to 0.
3. Area = radius \* radius \* pi
4. Print Area.

**Q. Median of 3 numbers.**

1. Enter Num1, Num2, Num3.
2. Set Median to 0.
3. Sort by ascending order.
4. Separate the middle value and store in ‘Median’.
5. Print ‘Median’.

**GITHUB**

