**Name**: Akshay Kumar

**Roll no**: 24k-0911

**PF lab Task** : 2

**Flow chart:**

**Start**

Order availability

Read required order

no

Print stock not available

**yes**

**end**

Ask for payment

A

Payment verify

A

Payment error

no

yes

End

Order confirmed

**PSEUDOCODE LAB TASK**

1st find if the number is multiple of 5.

**Start**

**// Input/Output**

**Input any number (X)**

**//variable and Initialization**

**//Process steps**

**Set divisible by 5**

**// conditional statement**

**If the reminder is 0 then**

**Print “ the number is multiple of 5”**

**Else**

**Print “the number is not multiple of 5”**

**End**

**2nd Check if a character is uppercase or lowercase.**

**Start**

**Uppercase (X)**

**Lowercase (Y)**

**If uppercase then**

**Print “x”**

**Else print “y”**

**End**

**3rd Create a small calculator which only does ‘+’ or ‘\*‘Operations. (Hint: Take three variable inputs**

**with one being used for the operator)**

**Start**

**Input (x)**

**Input (Y)**

**Input operator**

**Set result to x operator y**

**Print result**

**End**

**4th Check whether a given number is positive, negative, or zero.**

**Start**

**Input x**

**Input y**

**Set Sum To X+Y**

**If sum >0 Then**

**Print “ the sum is positive”**

**Else sum <0 then**

**Print “the sum is negative”**

**Else If sum = 0 then**

**Print “the sum is zero”**

**End**

**5th Determine if a person is a teenager (between 13 and 19 years old).**

**Start**

**Input age**

**If Age is 13<age<19 Then**

**Print “person is teenager”**

**Else**

**Print “person is not teenager”**

**End**

Algorithm :

1: Implement an algorithm to determine if a given year is a leap year. A leap year is divisible by 4, but not divisible by 100, except if it is also divisible by 400.

1. Ask the user to enter a year
2. If a year /4 or /400 and not / 100
3. Display leap year

2. Implement an algorithm to count the number of occurrences of each character in a given string.

1.ask user to enter a string

2. set count =0

3.start loop for each character

4.display each character and it’s corresponding count.

3. Write an algorithm to calculate x raised to the power y (i.e., x ^y ) without using built-in power functions.

1.ask the user to enter base x

2. ask the user to enter exponent y

3. start loop set counter =0 iterate loop y times

4. each time multiply number by itself end loop

5. display the number

4. Calculate the area of a circle given its radius r.

1. Ask the user to enter radius
2. Set area to pie r^2 or pie r\*r
3. Display area for the user.

5. Find the median of three given numbers.

1.Ask the user to enter three numbers (a,b,c)

2.set median a+b+c/3

3. display median.