**Flowcharts:**

Read A

A=Input

START

If

A=number

False

Print

Wrong Input

Print

Correct Input

END

True

START

Read

Item code

Item cost

Payment

If

Valid code

Print

Invalid

False

True

If payment>=cost

False

Print

Insufficient funds

END

Print

Process error

True

If

Item dispensed

False

True

START

Receive package order

Prioritize for next dispatch

Urgent Delivery

Yes

No

Fragile item

Print

Handle With Care

True

False

END

Load onto delivery vehicle and dispatch order

Sort package following instructions

**PSEUDOCODE:**

**1)** START

// Input/Output

INPUT num1, num2, num3

// Conditional Statements

IF “num1 <num2” and “num1<num3”

PRINT “num1 is the smallest”

ELSE IF “num2<num1” and “num2<num3”

PRINT “num2 is the smallest”

ELSE

PRINT “num3 is the smallest”

END

**3)** START

// Input/Output

INPUT num1, num2

INPUT “\*” for multiplication

INPUT “/” for division

// Variables and Initialization

SET Result=0

// Conditional Statements

IF operator is “\*”

PRINT Result=num1\*num2

ELSE IF operator is “/”

IF num2 is not equal to 0

PRINT Result=num1/num2

ELSE

PRINT “Math Error”

END

**ALGORITHM:**

1. Ask user to enter “num”
2. Check if “num” is >=1
3. Input operator “/” for division
4. Set check if “num” is only divisible by 1 and itself
5. If yes then display “num is a prime number”
6. If no then display “num is not a prime number”

* Ask user to enter “Day Number” (1-365)
* Set the first day of the week as “Monday”
* Set 1st January as “Monday”
* Calculate the day using the “Day Number”, keeping 1 as Monday
* Display the day number
* Ask user to enter “num1”
* Ask user to enter “num2”
* Input operator “/” for division
* Set divide num1 by num2, num1/num2
* Set divide divisor by remainder of previous step till remainder is 0
* Display last divisor as the GCD