# ASSIGNMENT\_LAB02:

**FLOW CHARTS:**

**QUESTION#1:**

(LOGISTICS COMPANY)

**EXIT**

**Handle with care**

**Receive Package**

YES

**Urgent Delivery**

**START**

**Delivered**

NO

**Delivery Process**

**Is Item Fragile?**

**Sorting**

NO

YES

**Is It Urgent?**

**QUESTION#2:**

(Vending Machine)

**START**

**EXIT**

YES

**Dispensing Correct Item**

NO

**Insufficient Funds**

**Accepted?**

**Process Payment**

**Is It Available?**

**Product Availability**

YES

NO

**Out Of Stock**

**Invalid Input**

NO

YES

**Is Code Valid?**

**Input Product Code**

**PSEUDO CODE:**

**QUESTION#1:**

**START**

**Read A, B, C**

**If( A<B AND B<C) then**

**print “A is the smallest”**

**Else If (B<A AND A<C) then**

**print "B is the smallest”**

**Else**

**print “C is the smallest”.**

**END**

**QUESTION #3:**

**START**

**Read Num1, Num2, Operator**

**Set Multiplication, Division**

**Set Multiplication to Num1\*Num2**

**Set Division to Num1/Num2**

**If (The operator is “\*”)**

**print “The result is” ,Multiplication**

**Else If (The operator is “/”)**

**If (Num2 !==0)**

**print "The result is” ,Division**

**Else**

**print “Error”**

**Else**

**print “ Inavlid Operator”**

**END**

**ALGORITHMS:**

**QUESTION#1:**

**START**

1. Ask the user to enter a NUMBER.
2. Check If the number is less than or equal to 1.
3. If YES, then output "The number is not prime".
4. Otherwise, check if the number is 2.
5. If YES, then output "The number is prime".
6. Otherwise, set DIVISOR to 2.
7. While DIVISOR is less than or equal to NUMBER - 1:

a. If NUMBER % DIVISOR is equal to zero:

* 1. Output "The number is not prime".

ii. Break the loop.

b. Otherwise, increment DIVISOR.

1. If the loop completes without finding a divisor, output "The number is prime".

**END**

**QUESTION#2:**

**START**

1. **Ask the user to input a day\_number between 1 and 365.**
2. **Set remainder to (day\_number%7)**
3. **Set day\_of\_week to remainder**
4. **If remainder is equal to 1, output Monday**
5. **If remainder is equal to 2, output Tuesday**
6. **If remainder is equal to 3, output Wednesday**
7. **If remainder is equal to 4, output Thursday**
8. **If remainder is equal to 5, output Friday**
9. **If remainder is equal to 6, output Saturday**
10. **If remainder is equal to 0, output Sunday**
11. **Divide day\_number by 7.**
12. **Calculate remainder**
13. **Display day\_of\_week accordingly.**

**END.**

**QUESTION#3:**

**START**

1. **Ask the user to input num1 and num2.**
2. **Set gcd to (num1,num2)**
3. **If num2 is zero, then gcd will be num1.**
4. **If num2 is not zero, then divide num1 by num2 and get the remainder.**
5. **Replace the num1 by num2 and num2 by the remainder.**
6. **Create a loop and repeat the process until the remainder becomes zero.**
7. **Once the remainder is zero then the last non-zero value of num2 will be the gcd.**
8. **Display the gcd.**

**END**