Name: Abdullah Karim Bs(CS) Section 1 J

**PF Lab 02 Assignment**

**Flowchart:**

**Problem 1:**

Receive Package

Sort Package

Is Package Fragile

Is Delivery Urgent

Deliver Package

No

Deliver package early

Yes

Proceed as normal

No

Yes

Proceed as normal

Move package with care

**Problem 2:**

Error

Input Payment

Product is correct

Select Product

Repeat

No

Yes

Yes

No

Dispense Item

Error

Is Payment correct

**Pseudocode:**

**Problem 1:**

Start

Input num\_1

Input num\_2

Input num\_3

If num\_1 < num\_2 and num\_1 < num\_3

Then

Print (Smallest is num\_1)

Else

If num\_2 < num\_1 and num\_2 < num\_3

Then

Print (Smallest is num\_2)

Else

Print (Smallest is num\_3)

**Problem 3:**

Start

Input num\_1

Input operator

Input num\_2

If operator is "\*"

Then

result = num\_1 \* num\_2

Print (Result)

Else If operator is "/"

Then

If num\_2 ≠ 0

Then

result = num\_1 / num\_2

Print (Result)

Else

Print (Error: Division by zero is not allowed)

Else

Print (Error: Invalid operator)

End

**Algorithm**

**Problem 1:**

Ask the user to input a positive integer n

Output “True” if n is a prime number otherwise give output “False”

If n is less than or equal to 1, return “False”

If n is 2 return “True”

For each integer “d” from 2 to n – 1:

If n is divisible by d return “False”

If n is not divisible by d return “True”

**Problem 2:**

Ask the user to input any number between 1 and 365.

Divide the number by 7 and find the remainder.

If the remainder is 1, display "Monday."

If the remainder is 2, display "Tuesday."

If the remainder is 3, display "Wednesday."

If the remainder is 4, display "Thursday."

If the remainder is 5, display "Friday."

If the remainder is 6, display "Saturday."

If the remainder is 0, display "Sunday."

End.

**Problem 3:**

Ask the user to input two integers “a” and “b” such that a>=b

Divide a by b and find the remainder “r”

Replace a with b, and replace b with r

Repeat the process until the remainder r = 0

The greatest common divisor (GCD) is the last non-zero remainder