1. Design a flowchart, Pseudocode, Algorithm for processing a customer order at a restaurant, including handling special requests (Like add on).

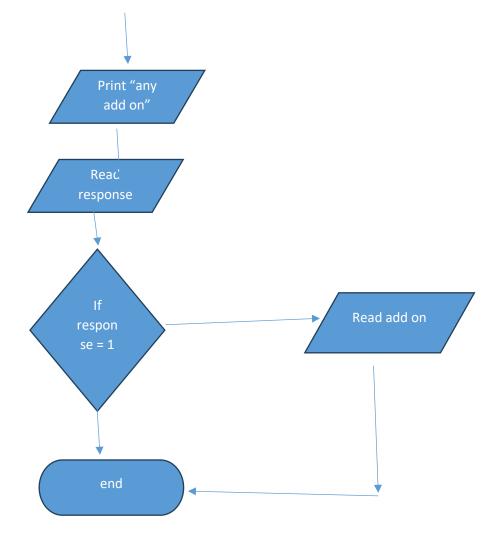
## Pseudocode:

- 1. Start
- 2. Print "Welcome to ABC Restaurant, what would you like to order"
- 3. Read Customer Order
- 4. Print "Any Add on."
- 5. Read Response
- 6. If response ==1 then
  - a. Read Customer Add on
  - b. Final order= Customer order + Customer add on
- 7. End if
- 8. Final Order=Customer order
- 9. Print Final order
- 10. End

## Algorithm:

- 1. Display a welcome message to customer and ask for the order
- 2. Read customer order
- 3. Ask customer for any add ons/Modification
- 4. Take customer response
- 5. If response is 1 then read any add on
- 6. Print the final order
- 7. If response is 0 then end the program





2. Design a flowchart, Pseudocode, Algorithm for handling a customer's deposit transaction at a

bank, including checks for account validity and deposit amount conditions.

# **Pseudocode:**

Start

Print "Please Enter your Pin"

Read Pin

While Pin != valid

Read Pin

End while

Print "Enter Amount to Withdraw"

Read Amount

If Amount > Bank Balance

Then print "Insufficent Bank balance"

Else

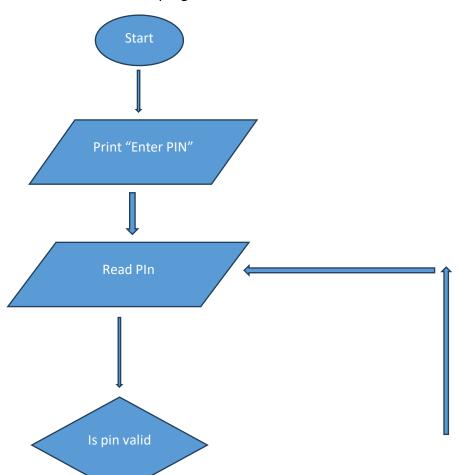
Bank balance = bank balance- Amount

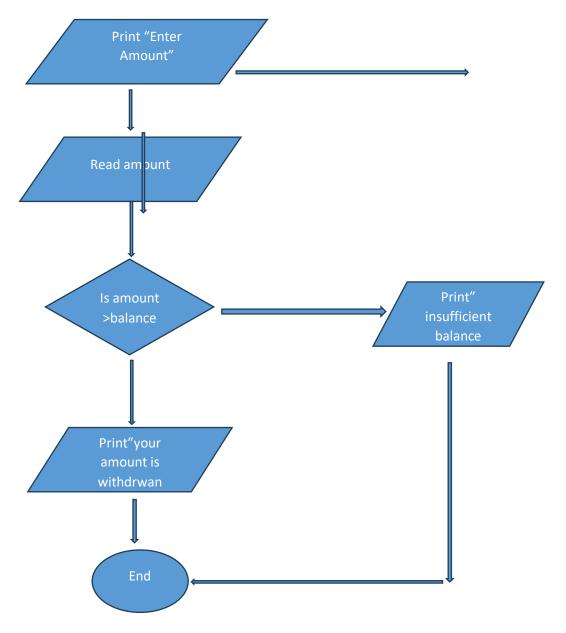
Print "your Amount has been withdrawn"

End

# **Algorithm:**

- 1. Display a message to ask user to enter pin
- 2. Read pin from user
- 3. Check whether pin is valid or not
- 4. If not again read pin
- 5. If yes then ask user to enter amount
- 6. Read amount
- 7. Check whether amount is greater then bank balance
- 8. If yes then print an error msg
- 9. Else end program





5. Create pseudocode a small calculator which only does '+' or '-'Operations. (Hint: Take three variable inputs with one being used for the operator)

### Pseudocode:

Start

Print "Enter num1,num2"

Read num1,num2

Print "Enter operator"

Read operator

While operator !="+" or operator!="-"

Read operator

End while

If operator == "+"

Then output=num1+num2

Else

Output=num1-num2

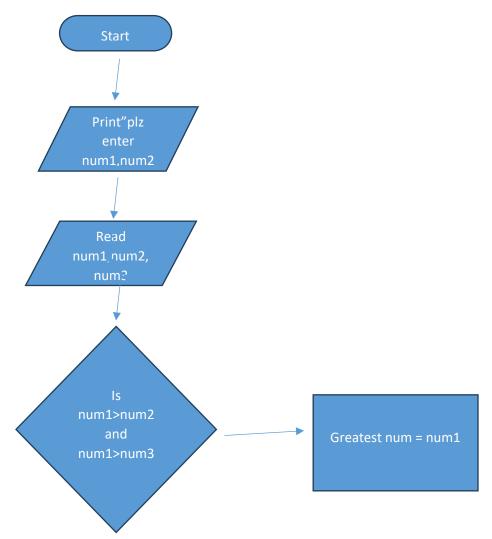
Endif

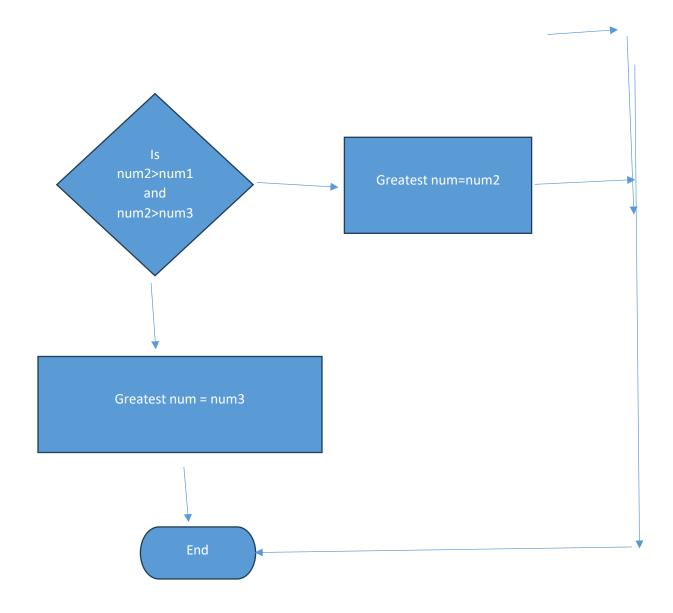
Print "your output is",output

End

# 3. Design a flowchart, Pseudocode, Algorithm to determine which of three provided numbers is the

## greatest.





## Pseudocode:

Start

Print"Enter num1,num2 num3"

Read num1,num2,num3

If num1>num2 And num1>num3 then

Greatest num=num1

Else if num2>num1 And num2>num3 then

Greatest num=num2

Else

Greatest num=num3

Print Greatest num

End

## Algorithm:

- Ask user to input num1
   Ask user to input num2
- 2. Ask user to input num3
- 3. Check whether num1 is greater than num2 and num3
- 4. If yes then store it to greatest num
- 5. Check whether num2 greater than num1 and num3
- 6. If yes store it to greatest num
- 7. Else store num3 to greatest num
- 8. Print greatest num

7. Implement an algorithm for making a simple calculator with all the operators (+,-,\*,/,%)

- 1. Ask user to input num1 and num2
- 2. Ask user to input operator
- 3. Use while loop to check whether correct operator is input or not
- 4. If not then again enter the operator
- 5. Check which operator is input
- 6. If op is "+" then add num1 and num2
- 7. If op is "-" then subtract num1 from num2
- 8. If op is"\*" then multiply num1 and num2
- 9. If op is"/" then divide num1 from num2
- 10.If op is "%" then use mod function
- 11. Display result

#### 9. Why we use .gitignore?

. gitignore file plays a crucial role in your Git repository. It tells Git which files or directories to ignore in a project. This is particularly useful for ignoring files that don't need to be committed, like temporary files, logs, or files containing sensitive information.

### 10.Difference between Algorithm and Pseudocode?

An algorithm is a systematic, logical approach that provides a step-by-step procedure for computers to solve a specific problem. Pseudocode is a simplified version of programming codes, written in plain English language and used to outline a program before its implementation.