

LAB TASK 02

Q1: Design a flowchart, Pseudocode, Algorithm for processing a customer order for a restaurant, including handling special request (like add on)

Solution : **PSEUDOCODE**

Start

Display "welcome to the restaurant"

Display "menu"

Display "would you like some add on"

Read "the add on "

If the add on is available then print "your add on are available"

Else "your add on are not available"

Read "the order"

If the order is available then print "your order is available"

Else "your order is not available"

Display "the bill"

Read "the bill"

If the bill == payment then print "thankyou for coming"

Else if "bill < payment then print "here's your change"

Else if "bill > payment then print "you have insufficient balance"

End if

end

ALGORITHM

Start

Welcome to the restaurant

Display the menu to the customer

Ask the customer about their order

Ask the customer would they like some add on

If they want some add on take the instruction of the add on

Display the amount of add on in the bill

Display the bill to the customer

Ask them about the payment

Take the payment

End

QUESTION2: Design a flowchart,Pseudocode, Algorithm for handling a customers deposit transaction at a bank.including checks for account validity and deposit amount of condition

Solution: “PSEUDOCODE”

Start

Print “welcome to the atm machine”

Display “Enter the bank number and pin”

Read “the pin”

If the pin is correct then print “correct pin “

Else “incorrect pin”

Display “the amount of transaction “

If cash in atm > amount in transaction then print “You have sufficient bank balance”

Else “you have insufficient bank balance”

End

“Algorithm”

1. Ask them about their bank account and the pin
2. Enter the pin
3. If the pin is incorrect tell them to rewrite the pin
4. if the pin is correct
5. Ask them about the transaction amount
6. If they sufficient amount in their bank their transaction would be successful
7. if they do not have sufficient amount their transaction would not possible
8. An error will be appear on the screen about having not sufficient amount of money to be transacted
9. End

Question3: Design a flowchart,Pseudocode,Algorithm to determine which of the three provided numbers is the greatest

“Pseudocode”

Start

Display “Enter number 1”

Display “Enter number 2”

Display “Enter number 3”

Read “the number 1, 2, 3”

If number 1 is > 2 and number 1 > 3 then print “number 1 is the greatest”

Else if

Number 2 $>$ number 3 and number 2 $>$ number 1 then print “number 2 is the greatest”

Else

print “number 3 is the greatest”

Endif

End

Algorithm

1. Ask the user to enter any three numbers
2. If number 1 is greater than number 2 and number 3 then number 1 is the greatest
3. If the number 2 is greater than number 3 and number 1 then number 2 is the greatest
4. If the number 3 is greater than number 2 and number 1 then number 3 is the greatest

Question4: Implement an algorithm where the users enters a number, and an appropriate number is displayed

Solution4: **“Algorithm”**

- Ask the user to enter the number from 1-12
- if the user enter the number 1 then print “january”
- if the user enter the number 2 then print “february”
- if the user enter the number 3 then print “march”
- if the user enter the number 4 then print “april”
- if the user enter the number 5 then print “may”
- if the user enter the number 6 then print “june”
- if the user enter the number 7 then print “july”
- if the user enter the number 8 then print “august”
- if the user enter the number 9 then print “september”
- if the user enter the number 10 then print “october”
- if the user enter the number 11 then print “november”
- if the user enter the number 12 then print “december”

Question5: Create a pseudocode a small calculator which only does “+” or “-” operation

Solution: **“ Pseudocode”**

Start

Display “Enter number 1,number 2,number 3

Read number 1,2,3

Display “Enter your operation”

if the operation == “+”

then sum the $N1+N2+N3$

Else if the operation == “-”

then subtract == “-”

End if

End

Question7: Implement an algorithm for making a simple calculator with all the operations (+,-,*,/,%)

- **Solution:**
- **Ask the user to enter the number**
- **if the user wants to sum the number then enter “+” operator for sum**
- **if the user wants to subtract the number then enter “-” operator for subtract**
- **if the user wants to multiply the numbers then enter “*” operator to multiply**
- **if the user wants to divide the numbers then enter “/” operator to divide**
- **if the user want to find the percentage then enter “%” operator to find the percentage**

Question9: Why we use .gitignore?

Solution: The purpose of gitignore files is to ensure that certain files not tracked by Git remain untracked. Gitignore is used in a git repository to ignore the files and directories which are unnecessary to project this will be ignored by the git once the changes as been committed to the remote repository

Question10 : Difference between Algorithm and Pseudocode ?

Solution: An algorithm is the 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.