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Lab Tasks

1.1. Algorithm

Start
1.Show greeting to the user

2.Show menu card to the user

3.Ask the user to enter their **order**

4.Ask user for additional **addon**

5.1Check if order is available

5.2 If order is not available Show “order unavailable “

5.3 Otherwise Set Bill to Order

6.Show Bill to the user

7.Get Cash from the user

8.11If Cash is greater than or equal to Bill then
User is shown the waiting time for their order

8.12 Otherwise Show to that user that Cash is Insufficient

8.2 if cash is is greater than Bill

8.21 Set Change to (Cash – Bill)

8.22 Show Change to the user

End

Psuedocode

- Start
- Display “Welcome to the restaurant”
- Display “ The menu is ……”
- Read Order
- Display “Kindly enter any addons u will like”
- Read Addon
- If Order == Available
- Bill = Order
- Else
- Display “ Order Not Available”
- End if
- Display Bill
- Read Cash

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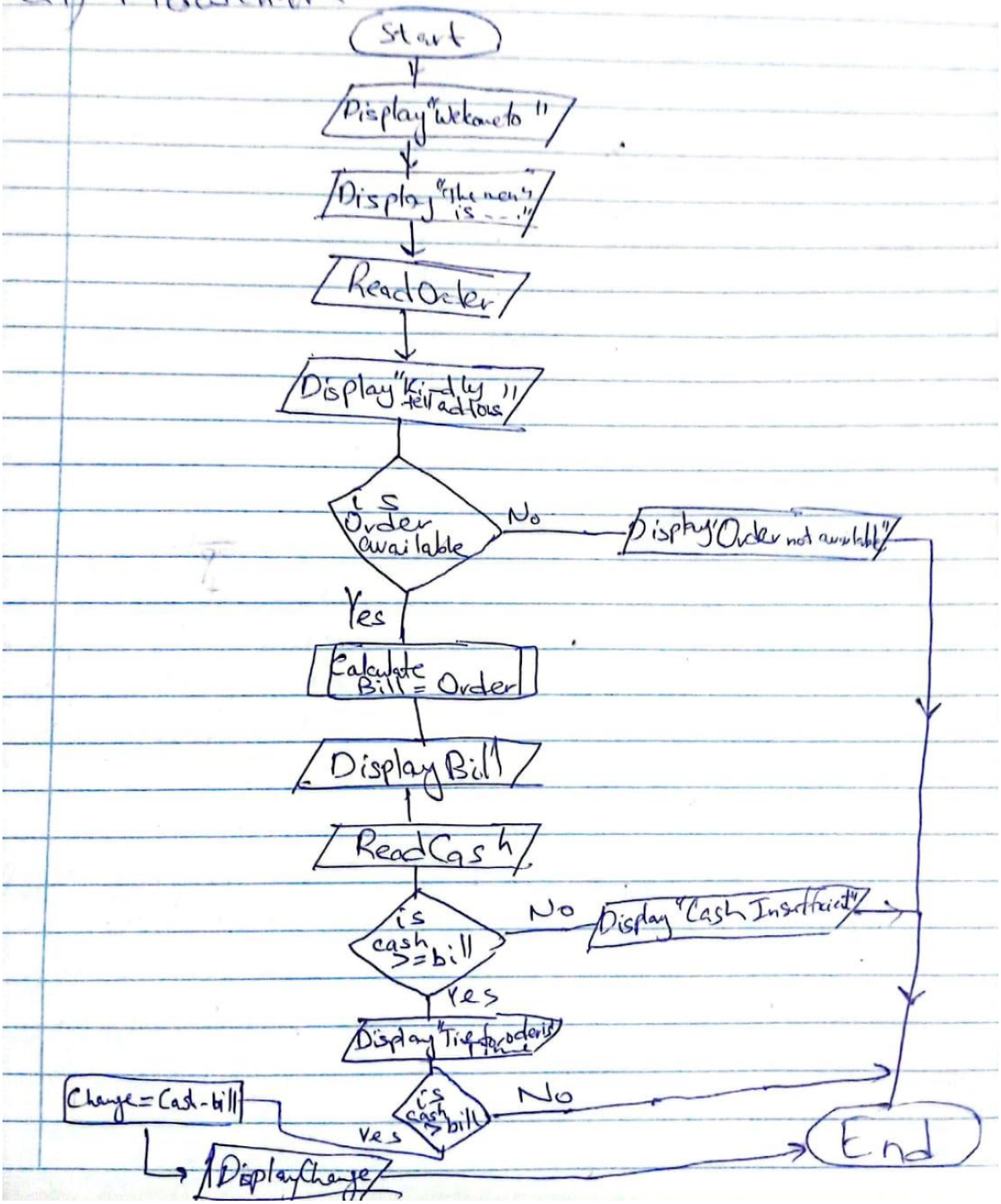
- If Cash >= Bill then
- Display “The time for the order is”,Time
- If Cash > Bill then
- Change = Cash – Bill
- Display “Your change is”,Change
- End IF
- Else
- Display “ Cash Insufficient”
- End if
- End

Date 21/08/2024

~~FE Lab2~~
PF Lab2

Q1) Flowchart



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Q2.

Algorithm

- Start
- Ask the user to enter their account number
- Ask the user to enter their Pin
- Check database to see if the account number is valid
- IF the account is not valid Show user to enter acc number again
- Otherwise check if the pin entered by the user matches the account number pin
- If the pin matches with the stored pin then show greeting to the user
- Otherwise Show user to enter pin again
- Ask the user to enter the amount to be withdrawn
- Check if the money requested is greater than the total available amount
- If the amount is greater than Allow user to withdraw
- Set Total Available amount to (Total Available Amount – Amount withdrawn)
- Show to the user that the transaction is succesful
- Show to the user the Total Available Amount
- Other Wise Show user that their balance is insufficient for the withdrawal
- End

Pseudocode

- Start
- Display " Enter your Account number"
- Read acc_number
- Display "Enter Pin"
  Read Pin
- If (acc_number == false And Pin == false)
- Display "Please Try Again"
- Else
- Display "Welcome to your Account"
- End if
- Display"Enter Amount to withdraw"
- Read Amount_withdraw
- If(Amount_withdraw > Total_Amount)
- Total_Amount = Total_Amount – Amount_withdraw
- Display "Transaction successful"
- Display "Your Remaining Balance is",Total_Amount
- Else
- Display "Balance in account insufficient to carry out this transaction"
- Endif
- End

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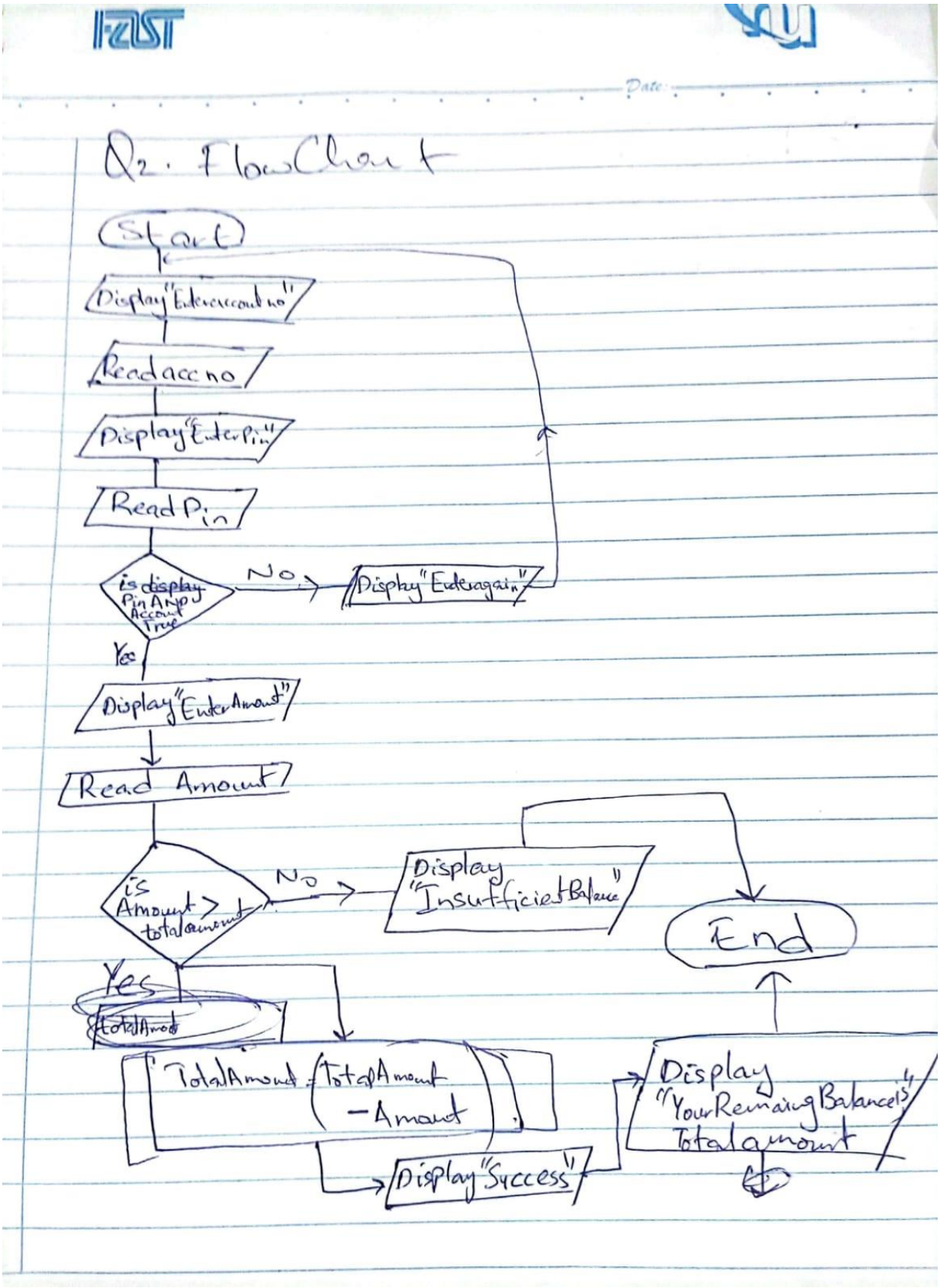

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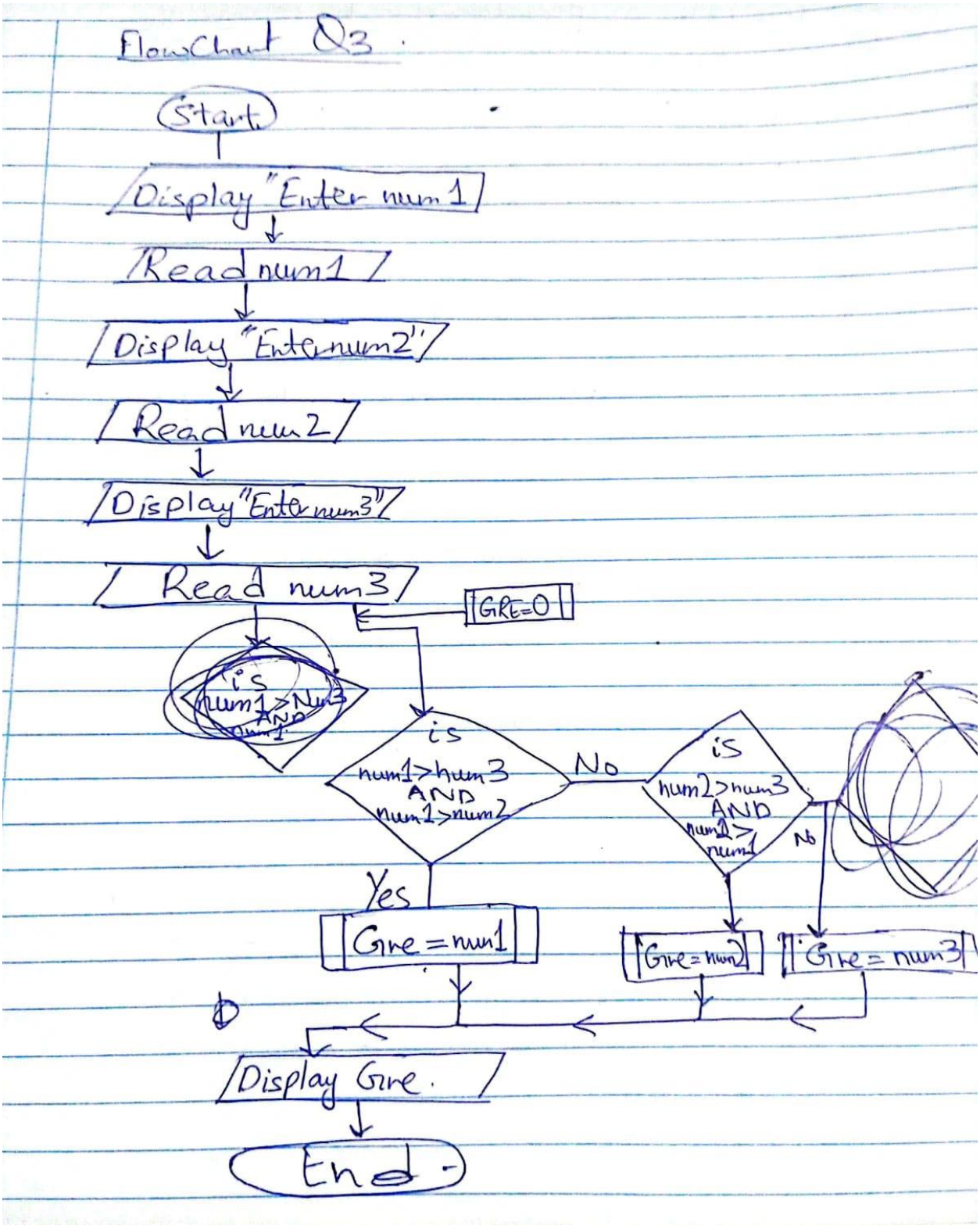
Q3.Algorithm

- Start
- Set Gre to 0
- Ask the user to input first value
- Ask the user to input second value
- Ask the user to input third value
- Set a to first value
- Set b to second value
- Set c to third value
- Check if a is greater than B as well as c
- If it is greater than both Set Gre to a
- Otherwise
- Check if b is greater than a as well as c
- If it is Greater than both then Set Gre to b
- Check if c is greater than a as well as b
- If it is Greater than both then Set Gre to c
- Show Gre to the user
- End

Psuedocode

- Start
- Gre = 0
- Display”Enter First Value”
- Read FirstVal
- Display”Enter Second Value”
- Read SecVal
- Display “Enter Third Value”
- Read ThirdVal
- a = FirstVal
- b = SecVal
- c = thirdVal
- if(a>b AND a >c)
- Gre = a
- Else if (b>c AND b>a)
- Gre = b
- Else if(c>a AND c>b)
- Gre = c
- End if
- Display Gre
- End



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Q.4

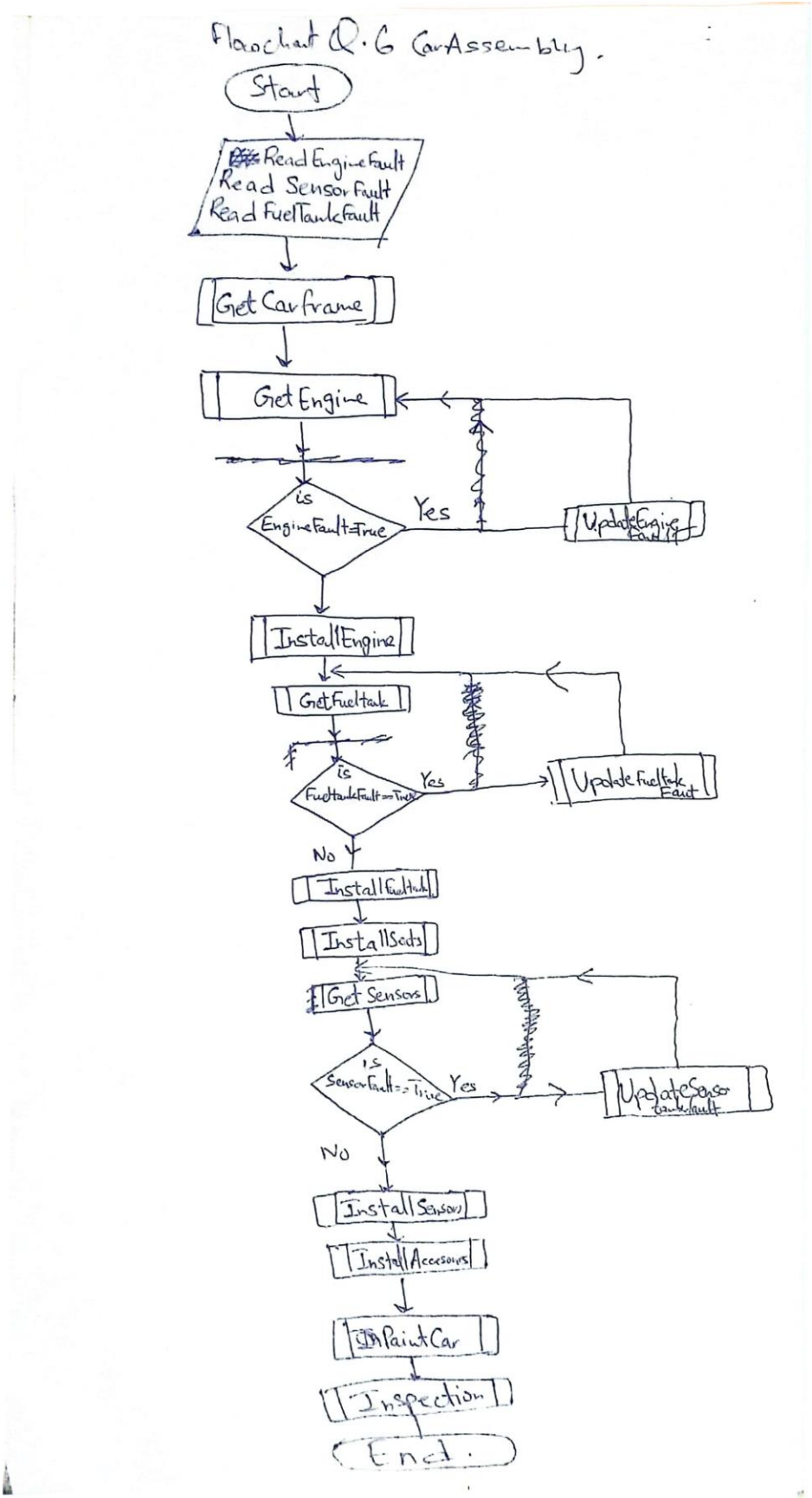
Algorithm

- Ask the user to enter a number

- Check the number
- If number is greater than 12 show user to enter again
- OtherwiseIF the number is 1 set month to January
- Otherwise IF the number is 2 set month to February
- Otherwise If the number is 3 set month to March
- Otherwise If the number is 4 set month to April
- Otherwise If the number is 5 set month to May
- Otherwise If the number is 6 set month to June
- Otherwise If the number is 7 set month to July
- Otherwise If number is 8 set month to August
- Otherwise If Number is 9 set month to September
- Otherwise IF Number is 10 set month to October
- Otherwise If Number is 11 set month to November
- Otherwise if Number is 12 set month to December
- Show month to the user

Q 5.

- Start
- Display"Welcome to the calculator"
- Display "enter 1st number"
- Read num1
- Display " Enter Operator"
- Read op
- Display "Enter 2nd number"
- Read num2
- If (op == +)
- Sum = num1 + num2
- Display Sum
- Else if (op == -)
- Diff = num1 – num 2
- Display Diff
- End if
- End


Flowchart Q.6 CarAssembly.
Start
Read EngineFault
Read SensorFault
Read FuelTankFault
Get Carframe
Get Engine
is EngineFault=True
Yes
UpdateEngine Fault
InstallEngine
GetFueltank
is FueltankFault==True
Yes
Update Fueltank Fault
No
Install Fueltank
InstallSeats
Get Sensors
is SensorFault==True
Yes
UpdateSensor Fault
No
Install Sensors
Install Accessories
Paint Car
Inspection
End.

Q.7.

Algorithm

- Show greeting to the user
- Ask the user to enter num1
- Show Operand list to the user
- Ask the user to enter Operand
- Ask the user to enter num2
- Check if Operand is +
- If it is + then set finalvalue to (num1+num2)
- Otherwise if Operand is –
- Set finalvalue to (num1-num2)
- Otherwise if Operand is /
- Set finalValue to (num1/num2)
- Otherwise if Operand is *
- Set finalValue to (num1*num2)
- Otherwise if Operand is %
- Set finalValue to (num1%num2)
- Show finalvalue to the user

Q.9)We use .gitignore to specify which files in the repository need to be ignored by github.

Q.10)An algorithm is a step by step solution written in layman terms telling the entire process in detail and order whereas a pseudocode uses programming like syntax to write the algorithm to show how the program will work when written in a programming language.