

“LAB TASK”

Question no.1:

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

“Pseudo code”

START

PRINT “WELCOME! How may I help you?”

DISPLAY Menu

PRINT “What would you like to have?”

READ Order

IF Order is available THEN

 PRINT “Do you like to have something else!”

 READ Response

 IF Response = “Yes” THEN

 PRINT “Please enter your special request and add-ons”

 READ SpecialRequest

 ELSE

 SpecialRequest = “None”

 END IF

CALCULATE Bill

PRINT “Here’s your bill”

READ Payment

IF Payment == Bill THEN

 PRINT “Enjoy your meal!

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PRINT "Thanks for coming"

ELSE IF Payment > Bill THEN

    CALCULATE change = Payment - Bill

    Print "Here's your change: ",change

ELSE IF Payment < Bill THEN

    PRINT "Pay additional amount"

END IF

ELSE "Order not available"

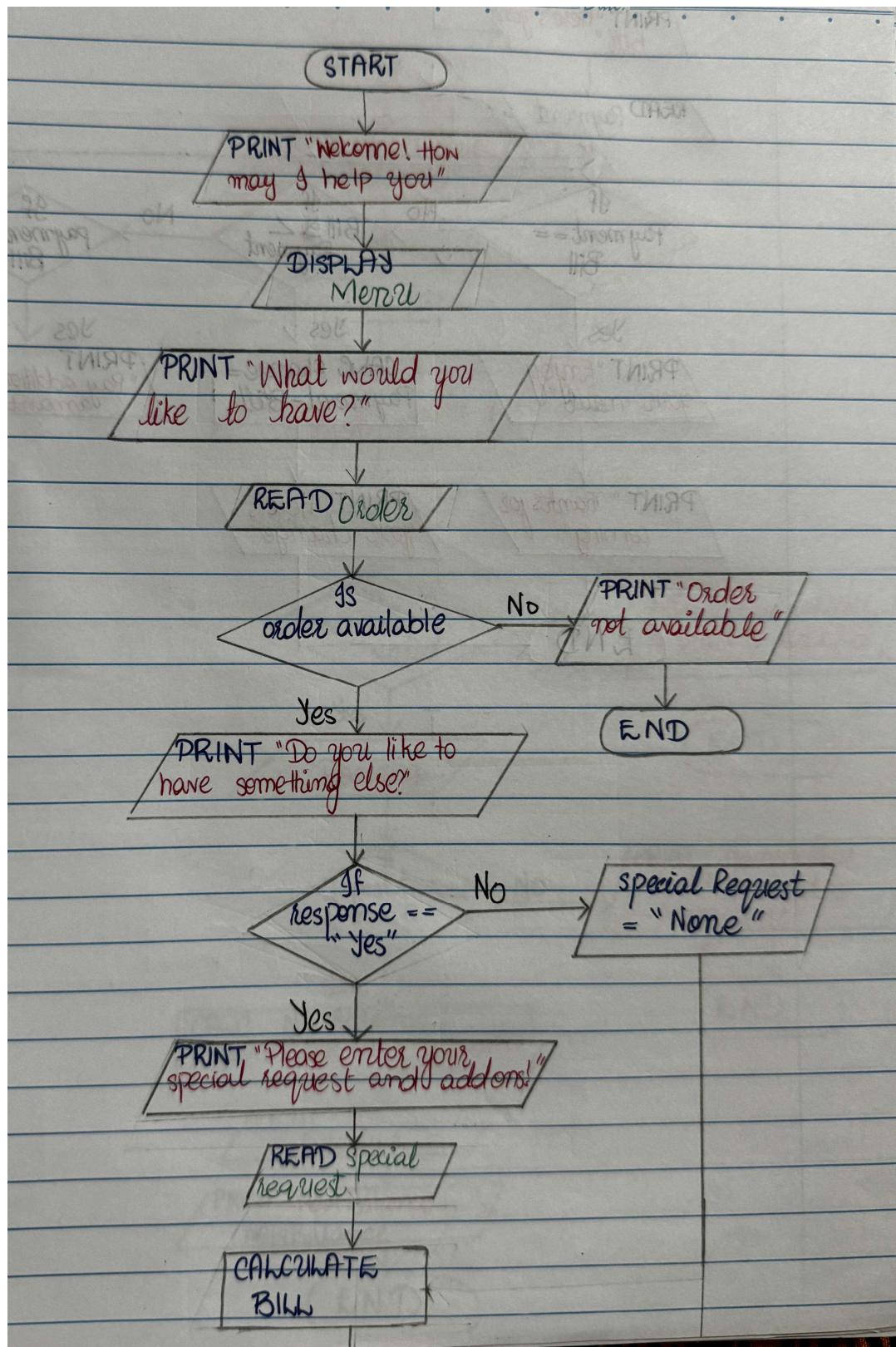
END IF

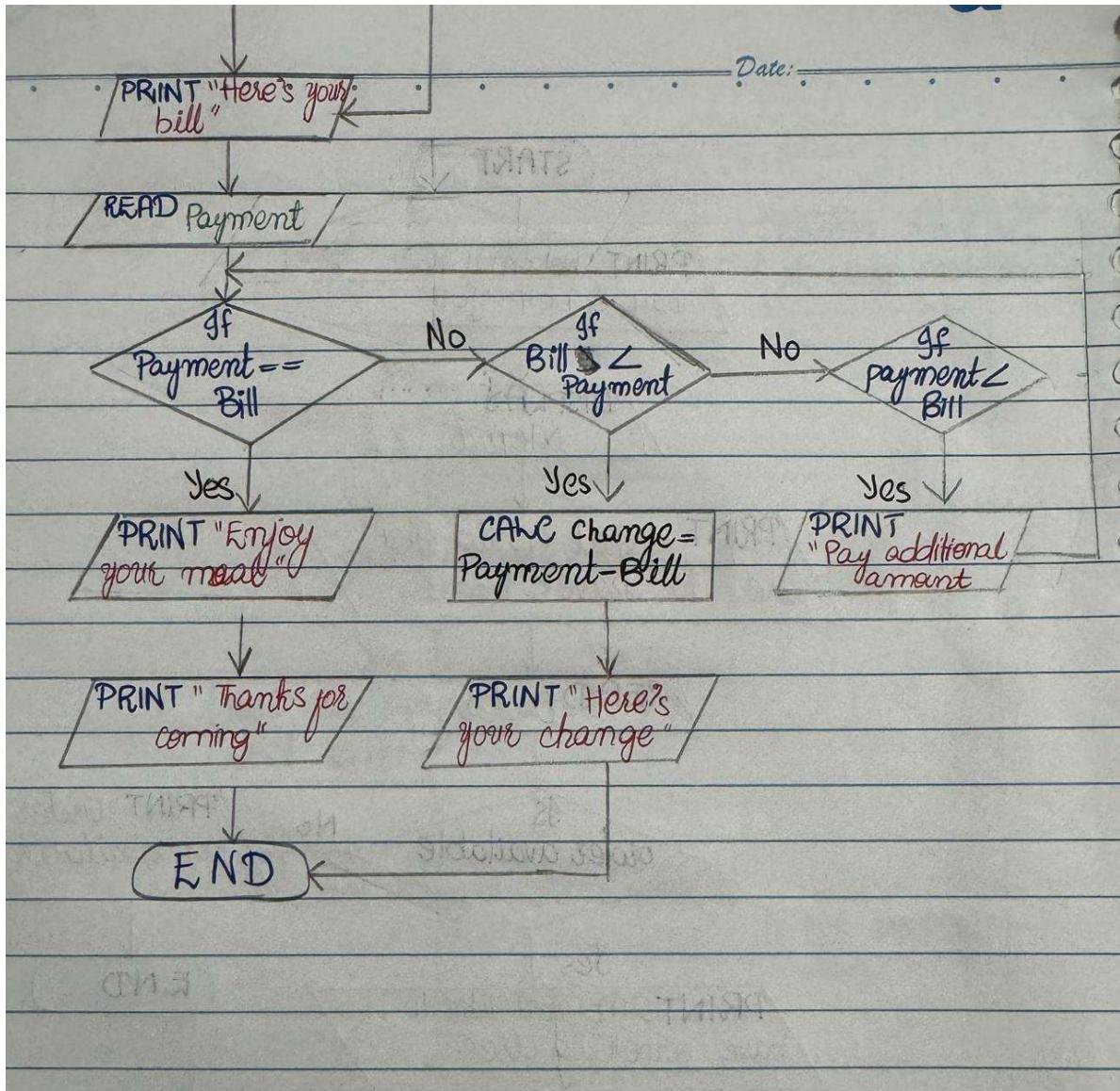
END

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“Algorithm”

- Welcome the customer and display the bill
- Ask the customer what would they like to order
- Check if the order is available
- If yes
 - Ask them if they want anything else
 - If yes
 - Provide the bill to the customer
 - If payment is equal to the bill
 - Display “Enjoy your meal” and “Thanks for coming”
 - Else if payment is greater than the bill
 - Calculate the change
 - Else if payment is less than the bill
 - Display “Pay the additional amount”
 - If order is not available
 - Display “Order not available”





QUESTION NO.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.

“PSEUDO CODE”

START

PRINT “Enter your current balance”

READ CurrentBalance

PRINT “Enter the amount you want to deposit”

READ DepositAmount

IF account != “Valid” THEN

 PRINT “Transaction failed!! Account is not valid”

ELSE

 PRINT “Processing.....”

 IF DepositeAmount <= 0 THEN

 PRINT “Transaction failed!! Amount must be greater than zero.”

 ELSE

 CALC NewBalance = CurrentBalance + DepositeBalance

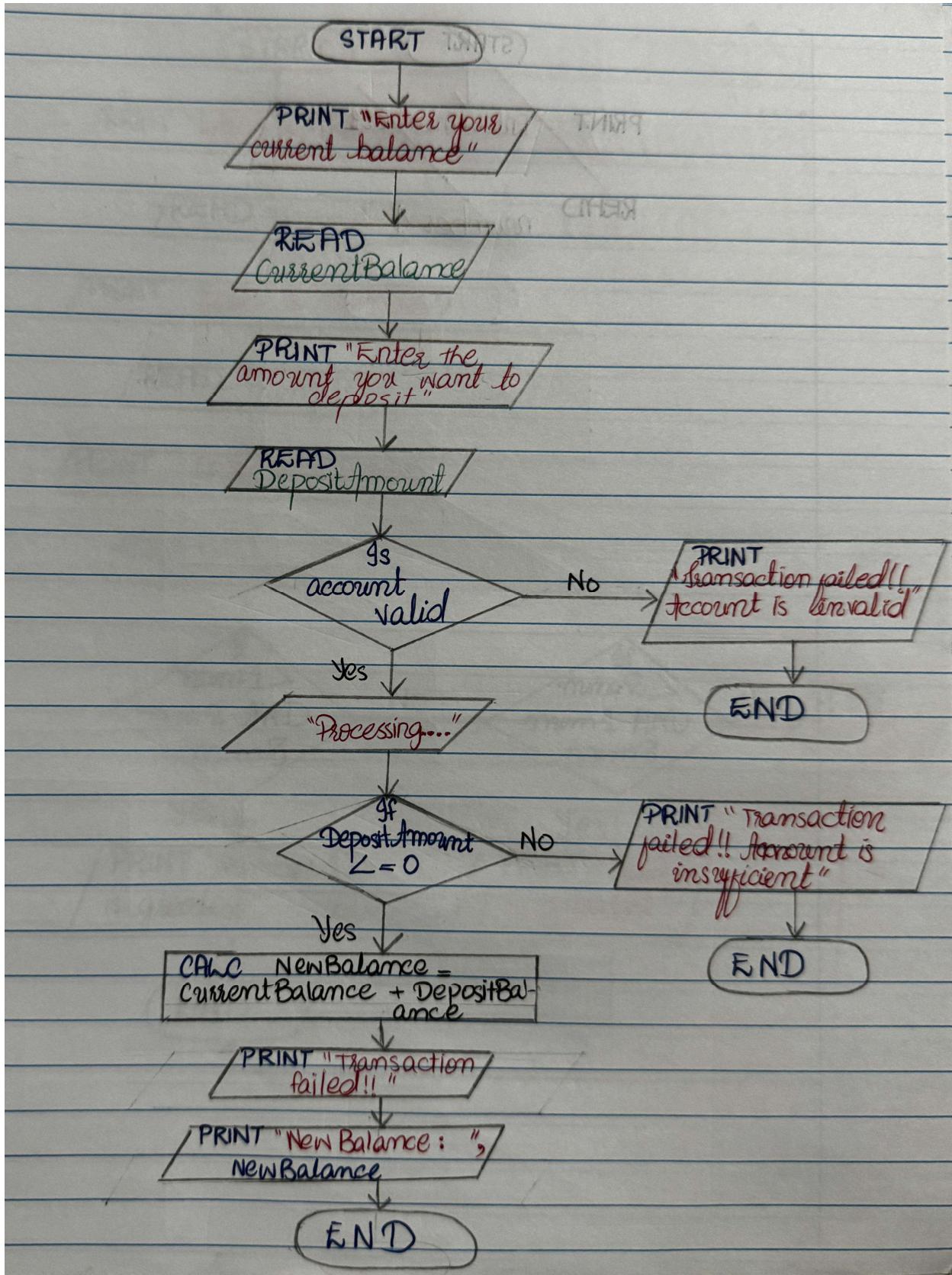
 PRINT “Transaction successful!!”

 PRINT “New Balance:,” NewBalance

 END IF

END IF

END



“ALGORITHM”

- Ask the user to enter the current balance
- Ask the user to enter the deposit amount
- Check if the amount is valid
- If the account is not valid, print a message “Transaction failed!! Account is not valid.
- Else if the account is valid then proceed the further step
- Check if the deposit amount is smaller than or equal to zero throw a message “Transaction failed!! Deposit amount must be greater than zero
- Set newbalance = accountbalance + depositamount
- And display new balance for the user

Question no.3:

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

“PSEUDO CODE”

START

PRINT “Enter the number 1”

READ number 1

PRINT “Enter the number 2”

READ number 2

PRINT “Enter the number 3”

READ number 3

IF number1>number2 AND number1>number3 THEN

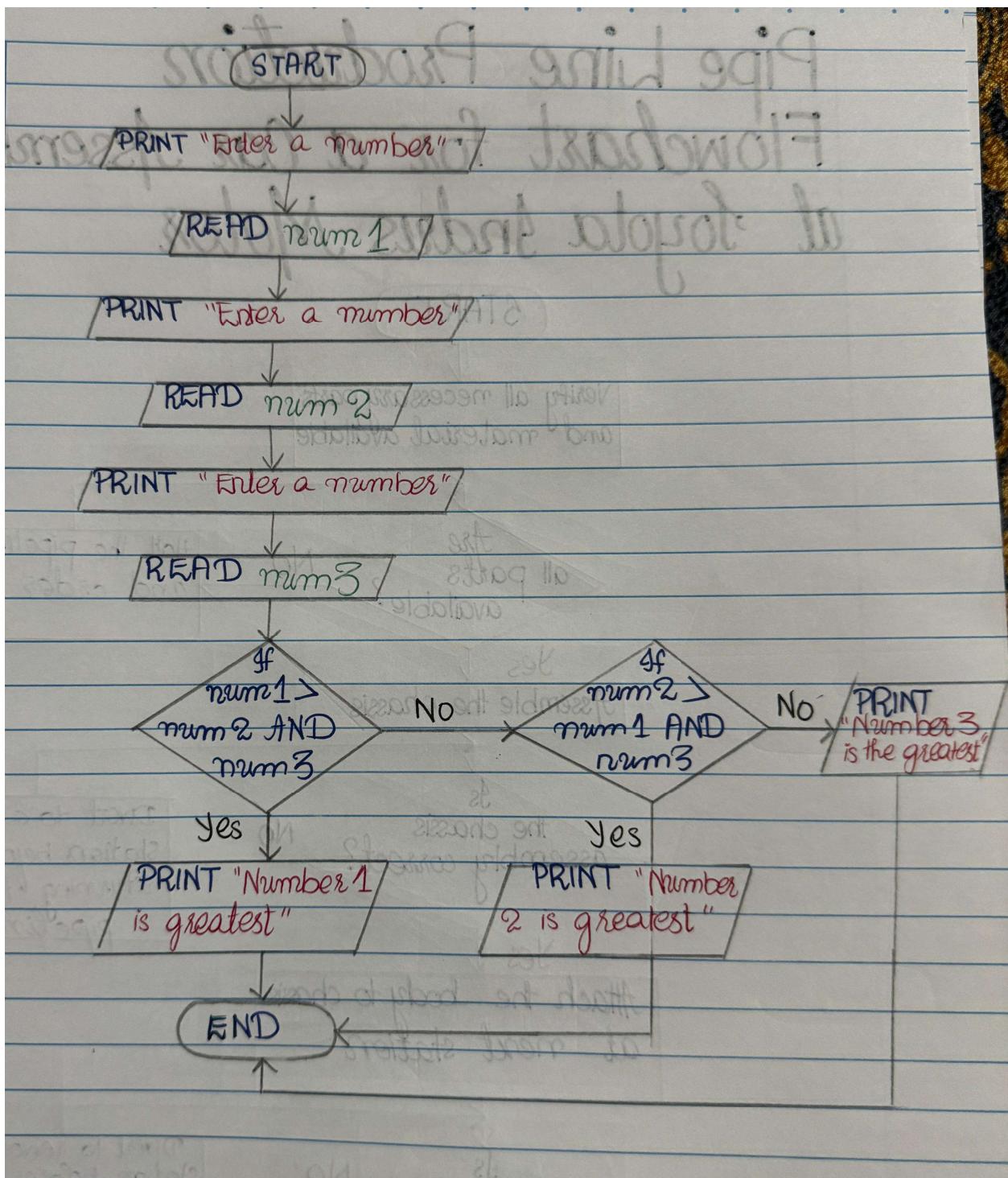
 PRINT “Number1 is greatest”

ELSE IF number2>number3 AND number2>number1 THEN

```
PRINT "Number2 is greatest"  
ELSE  
    PRINT "Number3 is greatest"  
END IF  
END
```

“ALGORITHM”

- Ask the user to enter three numbers named as
- “number1”
- ”number2”
- “number3”
- Check if “number 1” is greater than both “number 2” and “number 3” then
- Number1 is the greatest.
- Check if “number 2” is greater than “number 1” and “number 3”
- then
- Number2 is greatest.
- If “number 1” neither “number 2” will be greater
- then
- Number3 will be greatest.



QUESTION NO.4:

Implement an algorithm where the user enters a number, and an appropriate month is displayed.

“ALGORITHM”

- Ask the user to enter a number between 1-12
- If the number is 1, display “JANUARY”.
- If the number is 2, display “FEBUARY”.
- If the number is 3, display “MARCH”.
- If the number is 4, display “APRIL”.
- If the number is 5, display “MAY”.
- If the number is 6, display “JUNE”.
- If the number is 7, display “JULY”.
- If the number is 8, display “AUGUST”.
- If the number is 9, display “SEPTEMBER”.
- If the number is 10, display “OCTOBER”.
- If the number is 11, display “NOVEMBER”.
- If the number is 12, display “DECEMBER”.

QUESTION NO.5 :

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

“PSEUDO CODE”

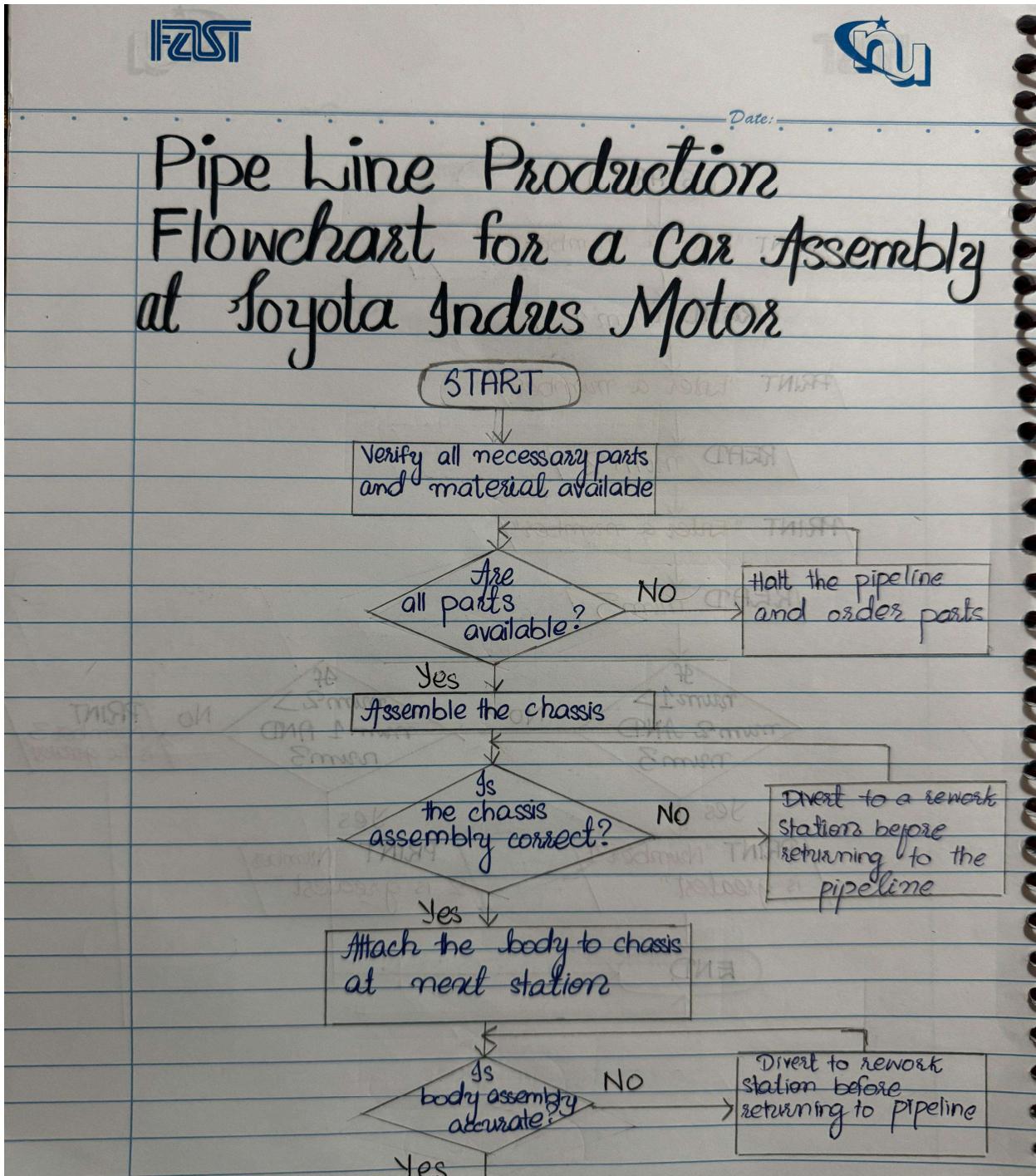
START

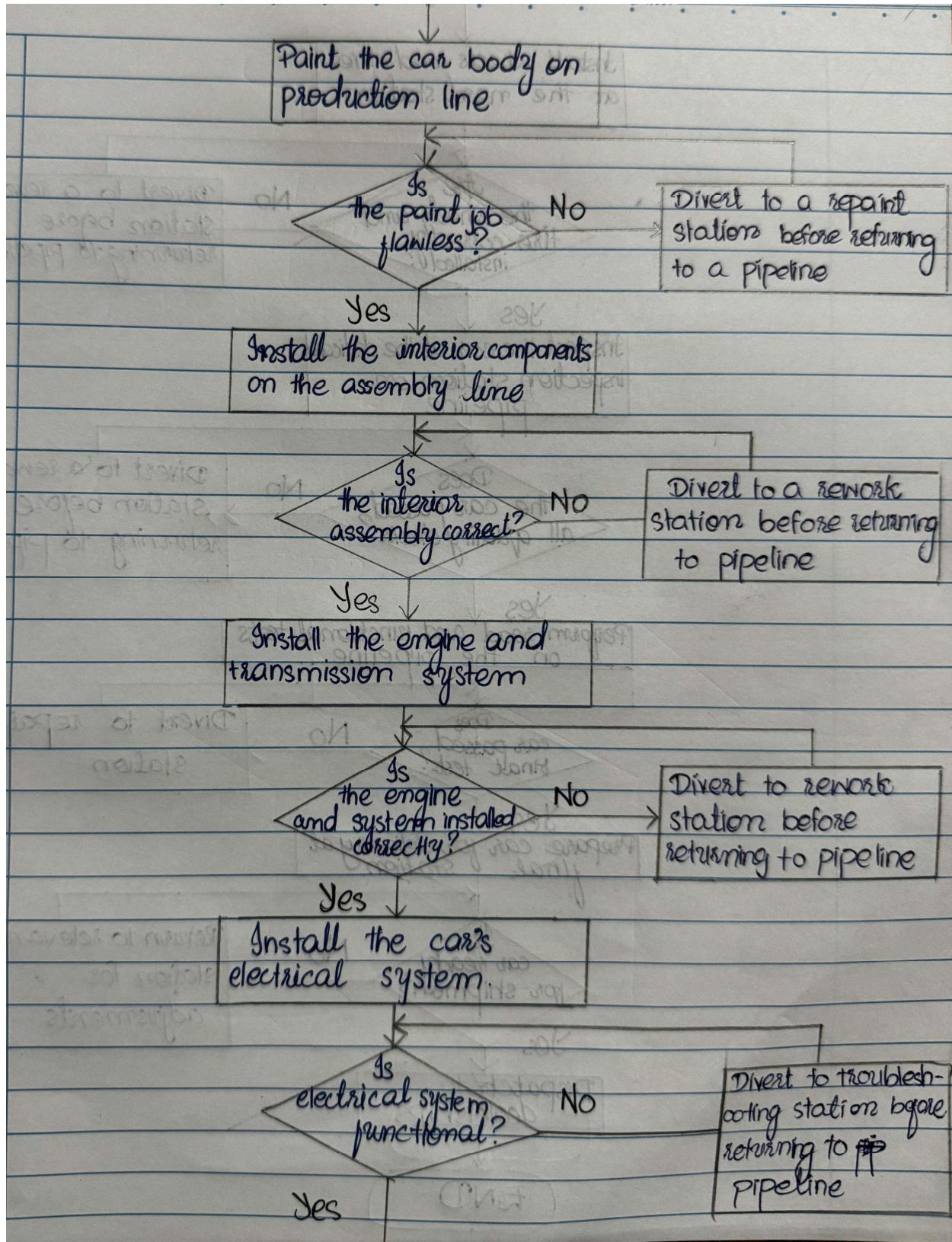
PRINT “Enter number 1”

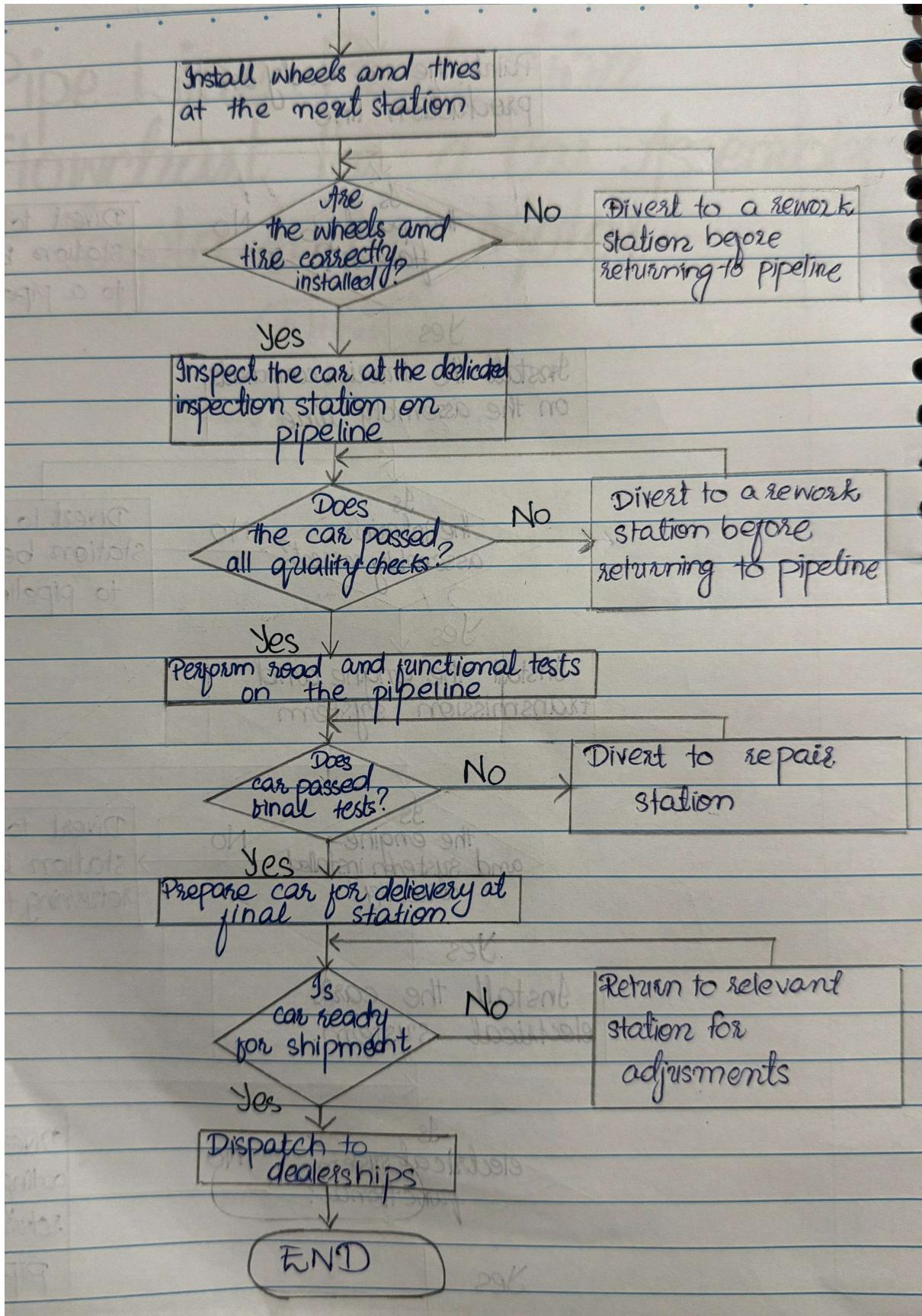
READ number 1

```
PRINT "Enter number 2"
READ number 2
PRINT "Enter number 3"
READ number 3
PRINT "Which operation do you want to perform? (+ OR -)"
READ operation
IF operation == "+" THEN
    CALCULATE Result = number1 + number2 + number3
    PRINT "The sum is ", Result
ELSE IF operation == "-" THEN
    CALCULATE Result = number1 - number2 - number3
    PRINT "The difference is ", Result
ELSE
    PRINT "Invalid Operation Selected"
END IF
END
```

QUESTION NO.6:







QUESTION NO.7:

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

“ALGORITHM”

- Ask the user to input a number1
- Ask the user to input a number2
- Ask the user to select any operation
- If the operation is “+”
 - Calculate Result = number1 + number 2
 - Display Result
- If the operation is “-“
 - Calculate Result = number1 – number2
 - Display Result
- Else if operation is “ * ”
 - Calculate Result = number1 * number2
 - Display Result
- Else if operation is “/ ”
 - Check number 2 is not zero
 - Calculate Result = number1/number2
 - Display Result
- Else
 - Display “Error: Division by zero is not allowed”
- Else if operation is “%”
 - Check number 2 is not zero
 - Calculate Result = number%number2
 - Else
 - Display “Error: Division by zero is not allowed”
 - Else
 - Display “Invalid Operation”

