Assignment #02

ANS 1:

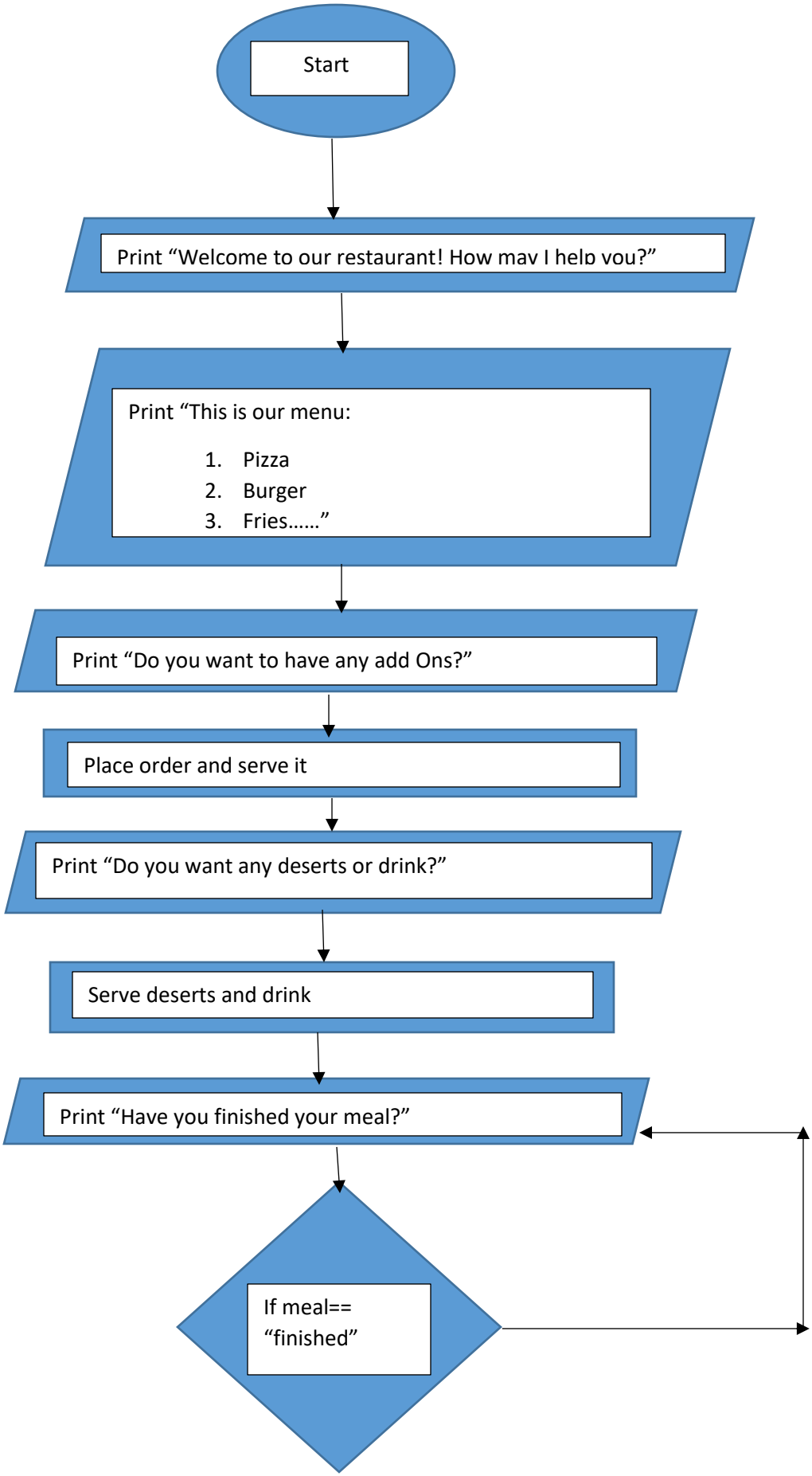
Algorithm:

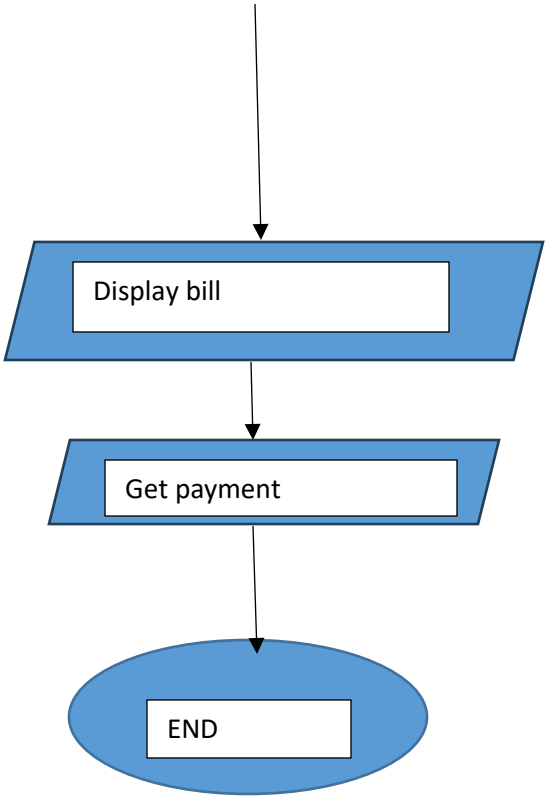
1. Greet the costumer
2. Display the menu
3. Receive the order form costumer
4. Ask for any add Ons
5. Place the order
6. Ask costumer for deserts and drinks
7. Serve the costumer with desired order
8. Ask if he has finished eating so bring bill
9. Receive payment
10. Give change if any
11. Greet the costumer and leave.

Pseudocode:

- START
- PRINT “Welcome to our restaurant, how may I help you?”
- PRINT “This is our menu please have a look and place your order:
    1. Burgers
    2. Fries
    3. Pizza…….”
- GET order
- PRINT “Do you want to have any add Ons?”
- GET add on
- PRINT “Do you need any deserts or drinks?”
- GET drinks
- PRINT “Have you finished your meal?”
- GET meal
- IF meal== “finished”:
    - PRINT “Here is your bill”
- ELSE:
    - REPEAT step 9
- PRINT “Thank you for coming hope you enjoyed our services”
- END

Flowchart:


Start
Print “Welcome to our restaurant! How may I help you?”
Print “This is our menu:
1. Pizza
2. Burger
3. Fries……”
Print “Do you want to have any add Ons?”
Place order and serve it
Print “Do you want any deserts or drink?”
Serve deserts and drink
Print “Have you finished your meal?”
If meal== “finished”



ANS 2:

Algorithm:

1. Receive account number and deposit amount required
2. Cross check the account number with the data base.
3. If account number doesn't exist so display an error message. Repeat until database matches
4. Ask for the password and crosscheck with the database
5. If password doesn't match the data base so display error message
6. Check if the required amount is within the limit if not then display error message
7. Add the required amount from the bank balance and display total balance

Pseudocode:

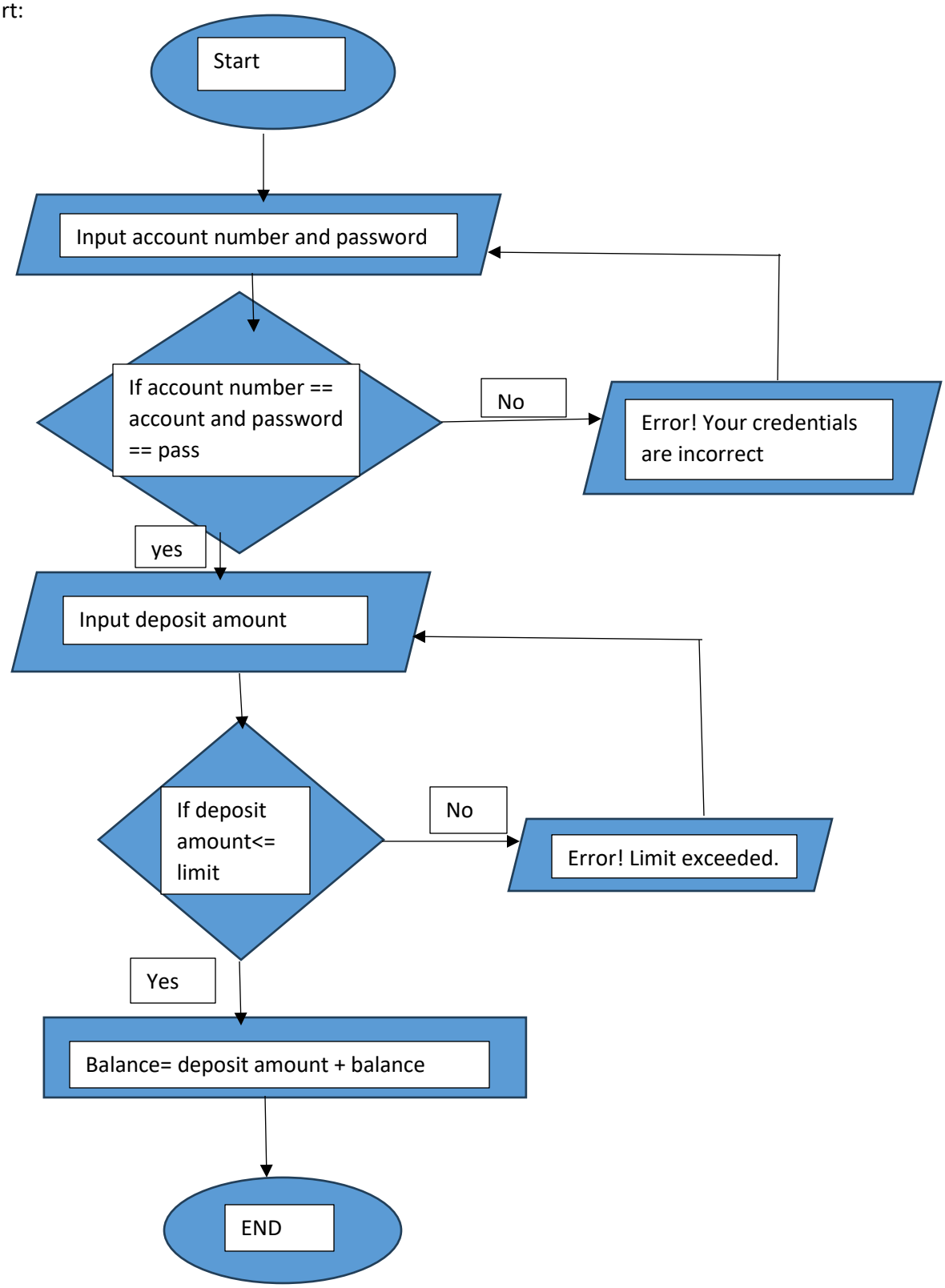
- START
- READ Account FROM Database
- READ Pass FROM Database
- PRINT "Enter account number:"
- READ account_number
- WHILE account_Number! = Account:
    - PRINT "Error, wrong account number!"
    - PRINT "Enter account number:"
    - READ accountNumber
- PRINT "Enter password: "
- READ password
- IF password == Pass:
    - PRINT "Enter the amount to be deposited:"

- READ amount
- CALCULATE balance = balance + amount
- PRINT "Amount deposited successfully, your total balance is: " balance

➢ ELSE
- PRINT "Error wrong password"

➢ END

Flowchart:



ANS 3:

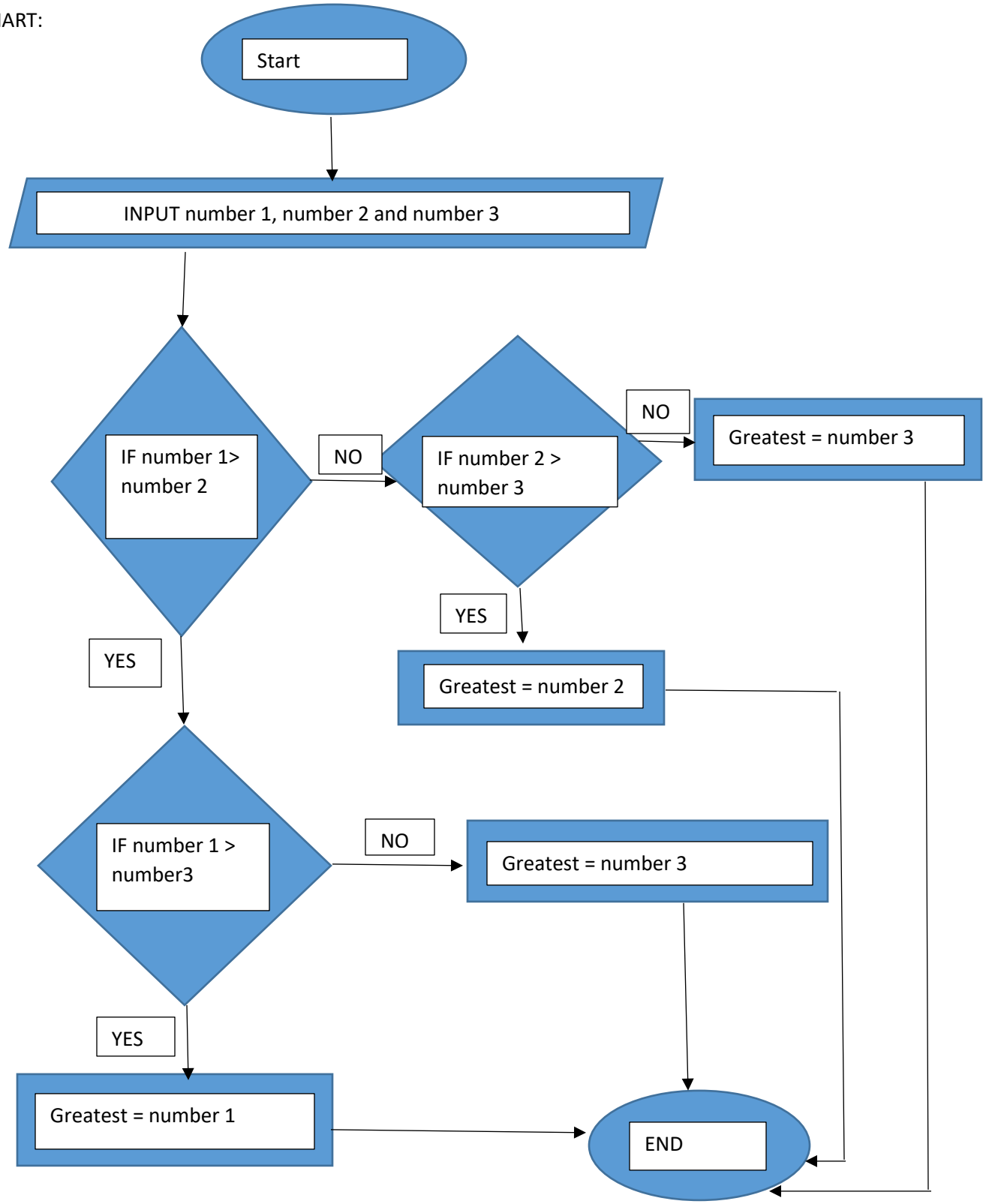
Algorithm:

1. Input 3 numbers
2. Compare number 1 and 2
3. If number 1 is greater proceed to compare number 1 and 3 else compare number 2 and 3
4. If number 1 is greater than number 3 display number 1 as greatest
5. Else if number 2 is greater than number 3 display number 2 as greatest
6. Else if number 3 is greater than number 1 and 2 display number 3 as greatest

Pseudocode:

- Start
- INPUT number 1, number 2 and number 3
- IF number 1> number 2 THEN
    - IF number 1 > number3 THEN
        - Greatest = number 1
    - ELSE
        - Greatest = number 3
- ELSE IF number 2 > number 3:
    - Greatest = number 2
- ELSE Greatest = number 3
- PRINT Greatest
- END

FLOWCHART:


Start
INPUT number 1, number 2 and number 3
IF number 1> number 2
NO
IF number 2 > number 3
NO
Greatest = number 3
YES
Greatest = number 2
YES
IF number 1 > number3
NO
Greatest = number 3
YES
Greatest = number 1
END

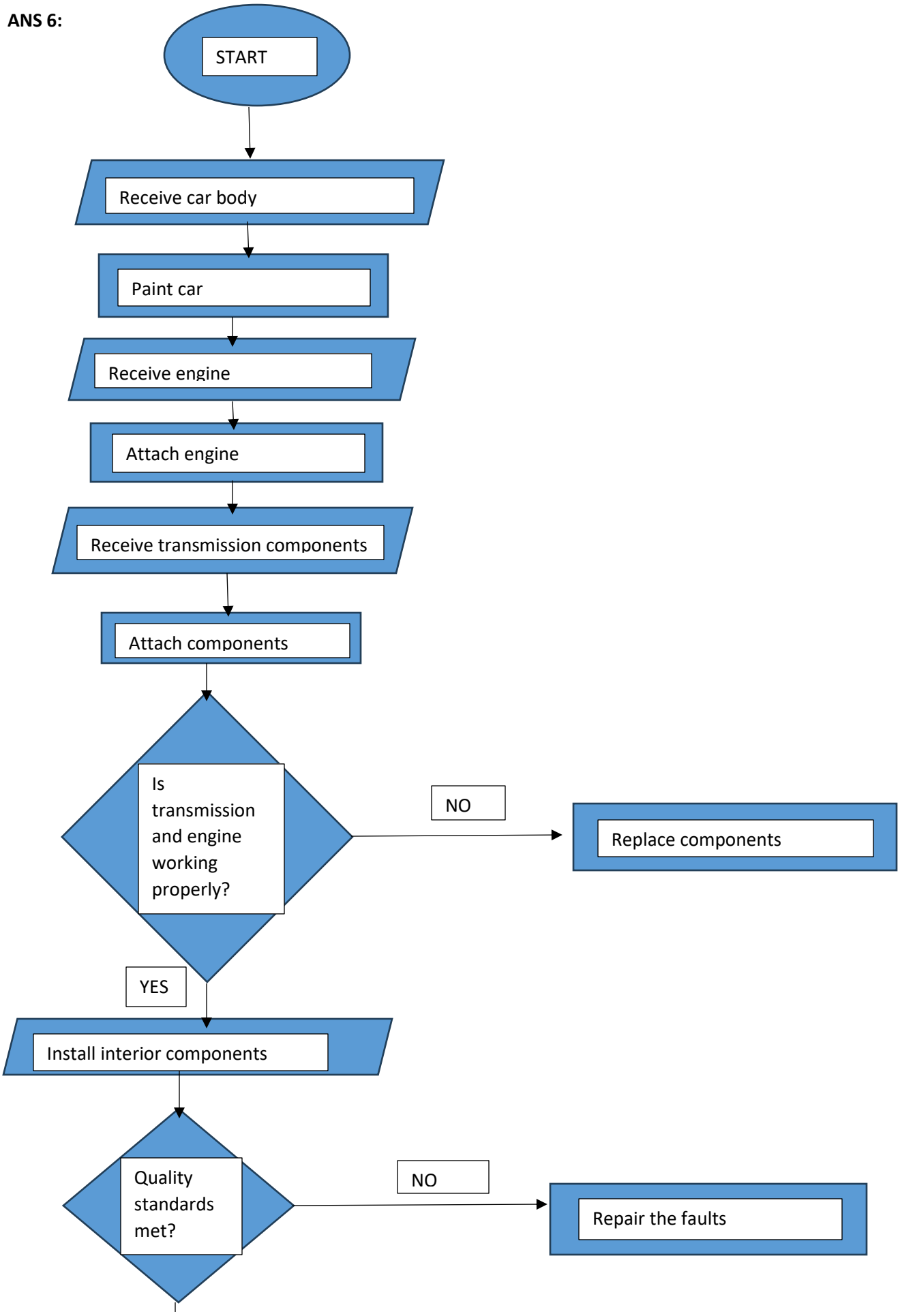
ANS 4:

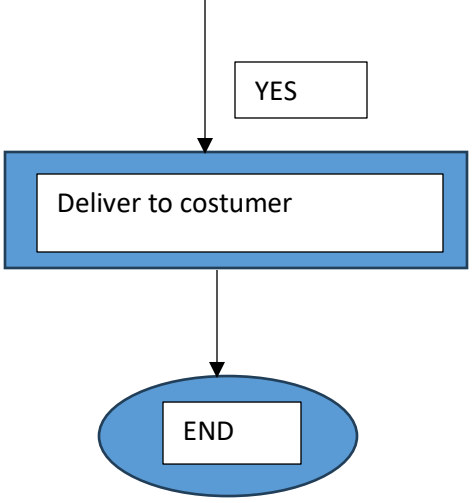
1. Take a number as input from the user
2. Make sure the number is between 1 to 12 inclusive. If not ask to input again
3. If number is 1 then display January
4. If number is 2 then display February
5. If number is 3 then display March
6. If number is 4 then display April
7. If number is 5 then display May
8. If number is 6 then display June
9. If number is 7 then display July
10. If number is 8 then display August
11. If number is 9 then display September
12. If number is 10 then display October
13. If number is 11 then display November
14. If number is 12 then display December

ANS 5:

- START
- PRINT “Enter first number”
- GET num1
- PRINT “Enter second number”
- GET num2
- PRINT “Enter an operator from + or -”
- Get operator
- IF operator== “+”:
    - THEN answer = num1+num2
- ELSE operator== “-“ :
    - THEN answer = num1-num2
- PRINT answer
- END

ANS 6:


START
Receive car body
Paint car
Receive engine
Attach engine
Receive transmission components
Attach components
Is transmission and engine working properly?
NO
Replace components
YES
Install interior components
Quality standards met?
NO
Repair the faults



ANS 7:

- START
- PRINT “Enter first number”
- GET num1
- PRINT “Enter second number”
- GET num2
- PRINT “Enter an operator from + or -”
- Get operator
- IF operator== “+”:
    - THEN answer = num1+num2
- ELSE IF operator== “-“ :
    - THEN answer = num1-num2
- ELSE IF operator == “ x”:
    - THEN answer = num1*num2
- ELSE IF operator == “ /”:
    - THEN answer = num1/num2
- ELSE IF operator == “ %”:
    - THEN answer = num1%num2
- PRINT answer
- END

ANS 9:

We use “. gitignore” to exclude unnecessary files and reduce repository size and to keep sensitive information private. It also Improves performance and organization.

ANS 10:

An algorithm is a set of obvious, logical, and sequential steps that solve a specific problem. Pseudocode is a way to express an algorithm or program logic in a human-readable form, using plain language and simple notations that resemble programming constructs.