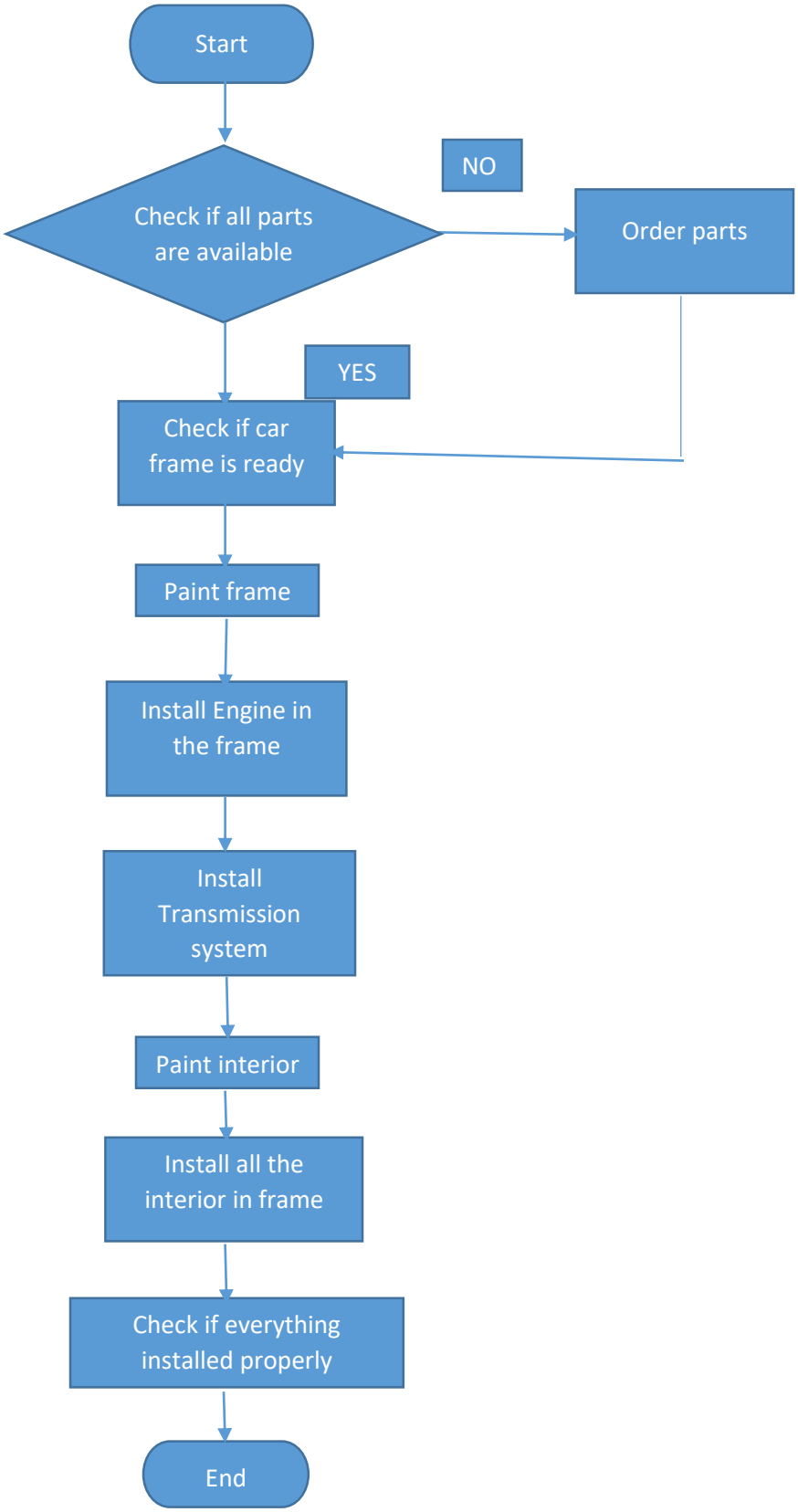
Question 6

You are working at Toyota Indus Motors and want to assemble a car. Design a flowchart with proper process modules and decision structures to replicate a pipeline production.

Flowchart



Question 9

Why we use .gitignore?

Answer:

.gitignore file is used in a git repository to ignore the files and directories which are unnecessary to project. It also ensure that these files are not tracked by git.

Question 10

Difference between Algorithm and Pseudocode?

Answer:

An algorithm is an approach in which we enlist a step-by-step procedure for computers to solve a specific problem.

While Pseudocode is a rough sketch of program written in English. It used to get the idea that how the program will look like.

Question 3

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

Pseudocode

1.START

2.INPUT number1

3.INPUT number2

4.INPUT number3

5.IF number1>number2 and number2>number3 then

Print “number1 is greatest”

6.Else IF number2>number1 and number1>number3 then

Print “number2 is greatest”

7.Else

Print “number3 is greatest”

8.END

Algorithm

1.Start

2.INPUT number1

3.INPUT number2

4.INPUT number3

5.IF number1 is greatest

Print “number1 is greatest”

6.Else if number2 is greatest

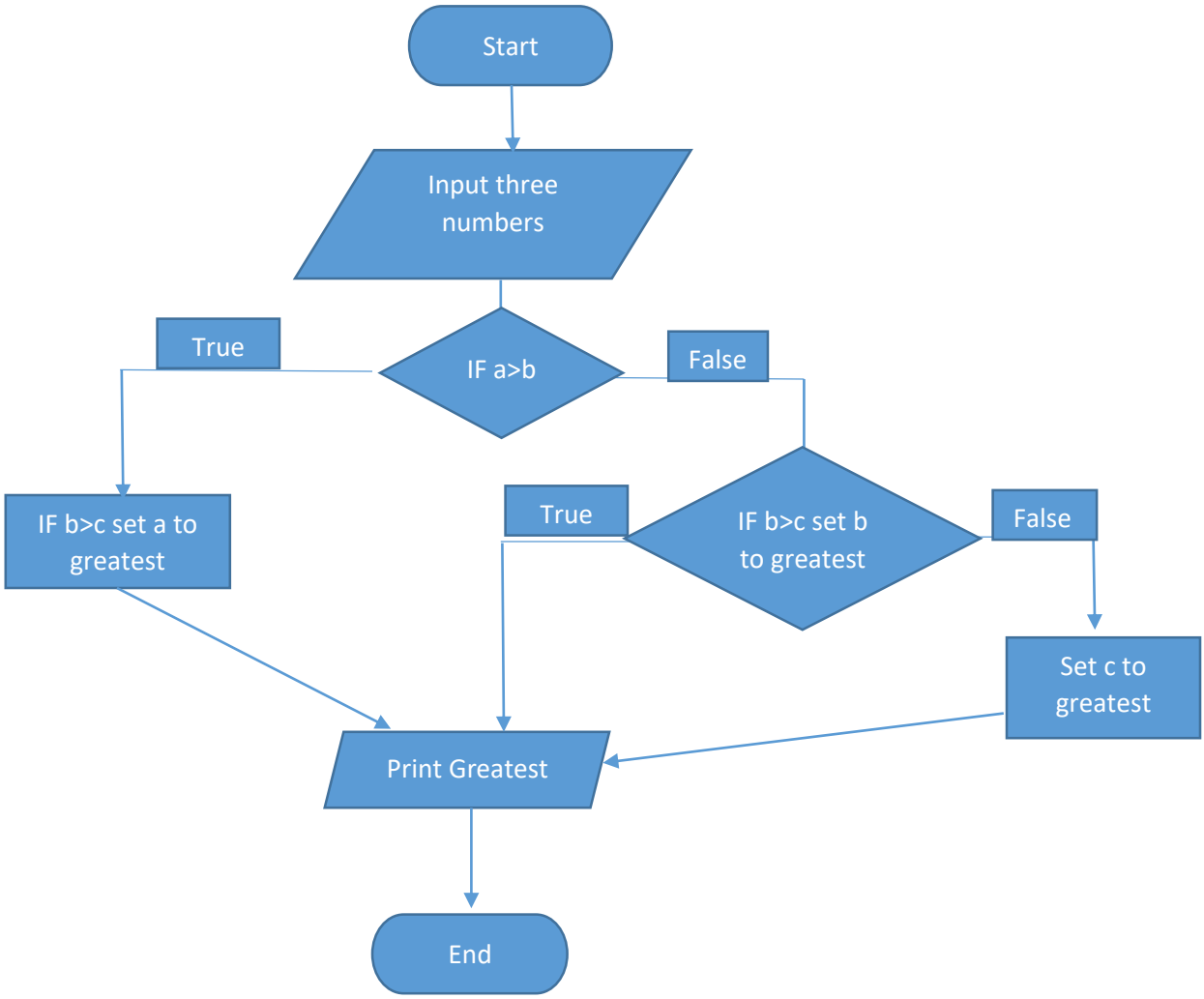
Print “number2 is greatest”

7.Else

Print “number3 is greatest”

8.END

Flowchart


Start
Input three numbers
IF a>b
True
False
IF b>c set a to greatest
IF b>c set b to greatest
True
False
Set c to greatest
Print Greatest
End

Question 4

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

Algorithm

1. START

2. INPUT number1

3. Switch (number1)

Case 1;

PRINT “January”

Case 2;

PRINT “February”

Case 3;

PRINT “March”

Case 4;

PRINT “April”

Case 5;

PRINT “May”

Case 6;

PRINT “June”

Case 7;

PRINT “July”

Case 8;

PRINT “August”

Case 9;

PRINT “September”

Case 10;

PRINT “October”

Case 11;

PRINT “November”

Case 12;

PRINT “December”

4. END

Question 5

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

Pseudocode

1.START

2.INPUT number1

3.INPUT number2

4.INPUT operator

5.IF operator is +

Print “number1+number2”

6.Else

Print “number1-number2”

7.END

Question 7

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

Algorithm

1.START

2.INPUT number1

3.INPUT number2

4.INPUT operator

5.IF operator is +

Print “number1+number2”

6.IF operator is –

Print “number1-number2”

7.IF operator is /

Print “number1/number2”

8.IF operator is %

Print “number1%number2”

9.END

Question 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.

Algorithm

1.START

2.Enter a deposit amount

3.Take account number from customer

4.Check if the account is active or not

5.Check if the deposit amount is greater than zero

6.Deposit the amount in the bank account

7.Display confirmation message

8.END

Pseudocode

1.START

2.INPUT deposit amount

3.INPUT account number

4.IF account number is valid

IF deposit amount is greater than zero

Balance=Balance + deposit amount

PRINT “Balance”

Else

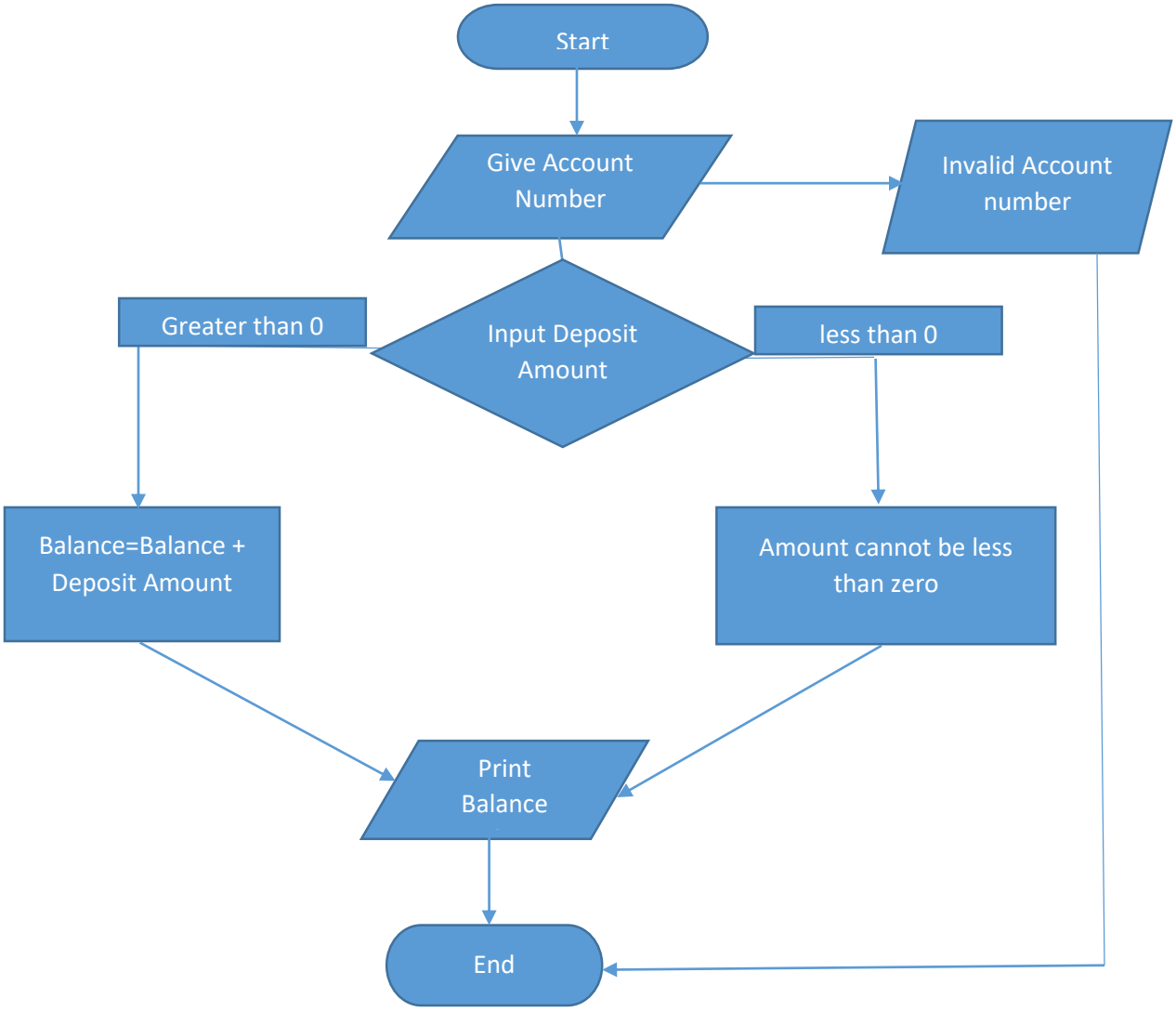
PRINT “deposit amount should be greater than zero”

5.Else

Print “Account number is invalid”

6.END

Flowchart



Question 1

Design a flowchart, Pseudocode, Algorithm for processing a customer order at a restaurant,

including handling special requests (Like add on).

Algorithm:

1.Start

2.Take order from the customer and assign it a number

3. Ask for any Add-ons

4. IF (Add-ons)

Write down add-ons and increase the price of the bill and tell them

5. Else

Confirm the order and tell them the price

6. Give the order to the chef.

7. After chef has made the order then serve it.

8. Receive the payment from the customers.

9. End

Pseudocode

1.Start

2.INPUT Order

3.INPUT Payment

4.IF Add-on is available then

Print Order + Add-on in the bill

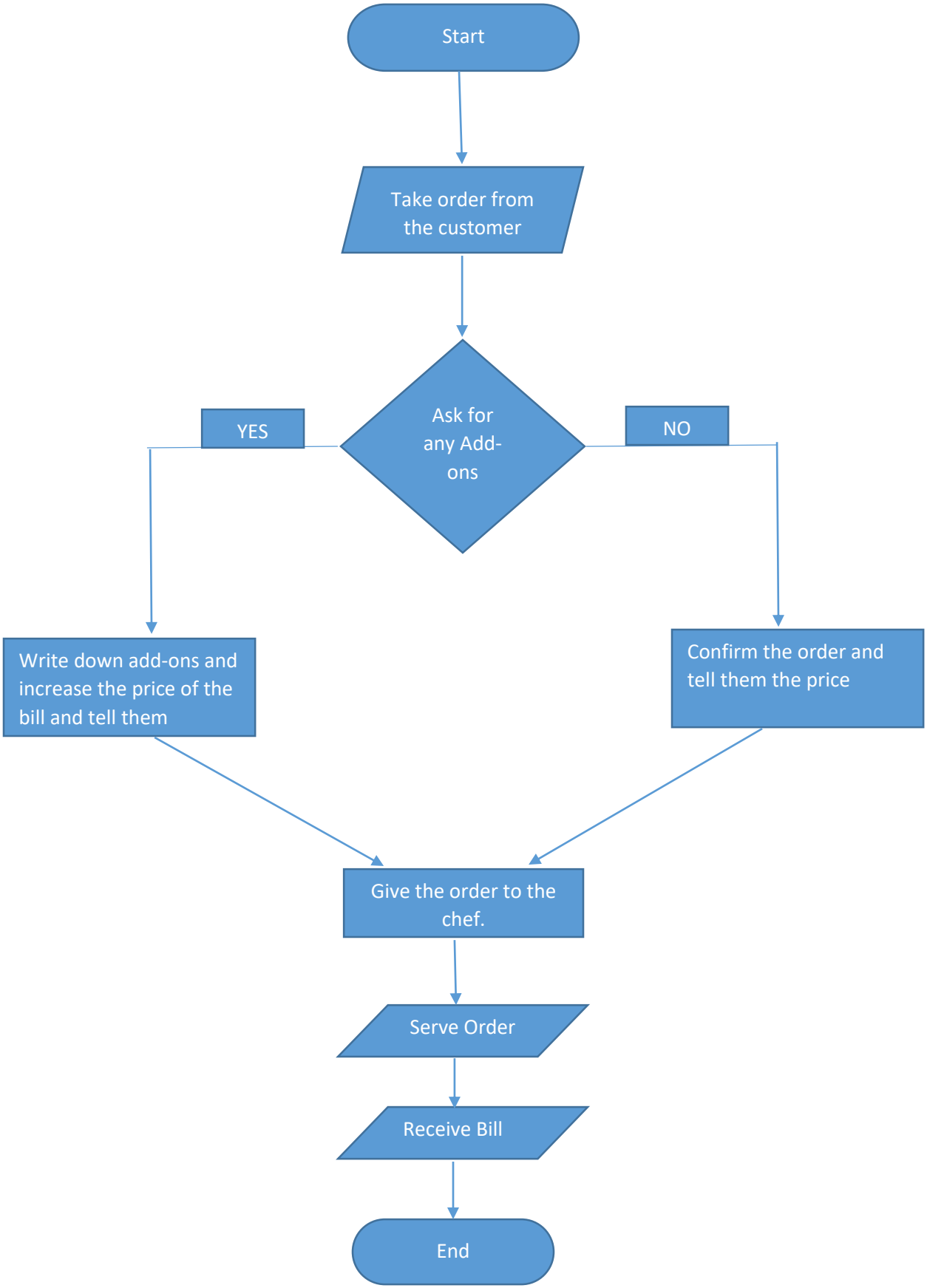
5.Else

Print Order in the bill

6.Payment=Bill

5.End

Flowchart


Start
Take order from the customer
Ask for any Add-ons
YES
NO
Write down add-ons and increase the price of the bill and tell them
Confirm the order and tell them the price
Give the order to the chef.
Serve Order
Receive Bill
End