

Task # 1:

Algorithm:

1. Greet the customer by saying **“Welcome, what would you like to eat ?”**
2. Display the **Menu**
3. Ask the customer to enter his **Order**
4. Read the **Order**
5. Ask for any **add on’s**
6. Calculate **Bill**
7. If **add on included** then
8. Set **Total Bill** to **Bill + add on**
9. Else Set **Total Bill** to **Bill**
10. Get **Payment**
11. Display **Waiting Time**

Pseudo Code:

START

PRINT **“Welcome, what would you like to eat?”**

DISPLAY **Menu**

PRINT **“Enter your order?”**

INPUT **Order**

PRINT **“Any add on?”**

INPUT **add on**

IF **add on = Included**

THEN CALCULATE **Total Bill = Bill + add on**

ELSE

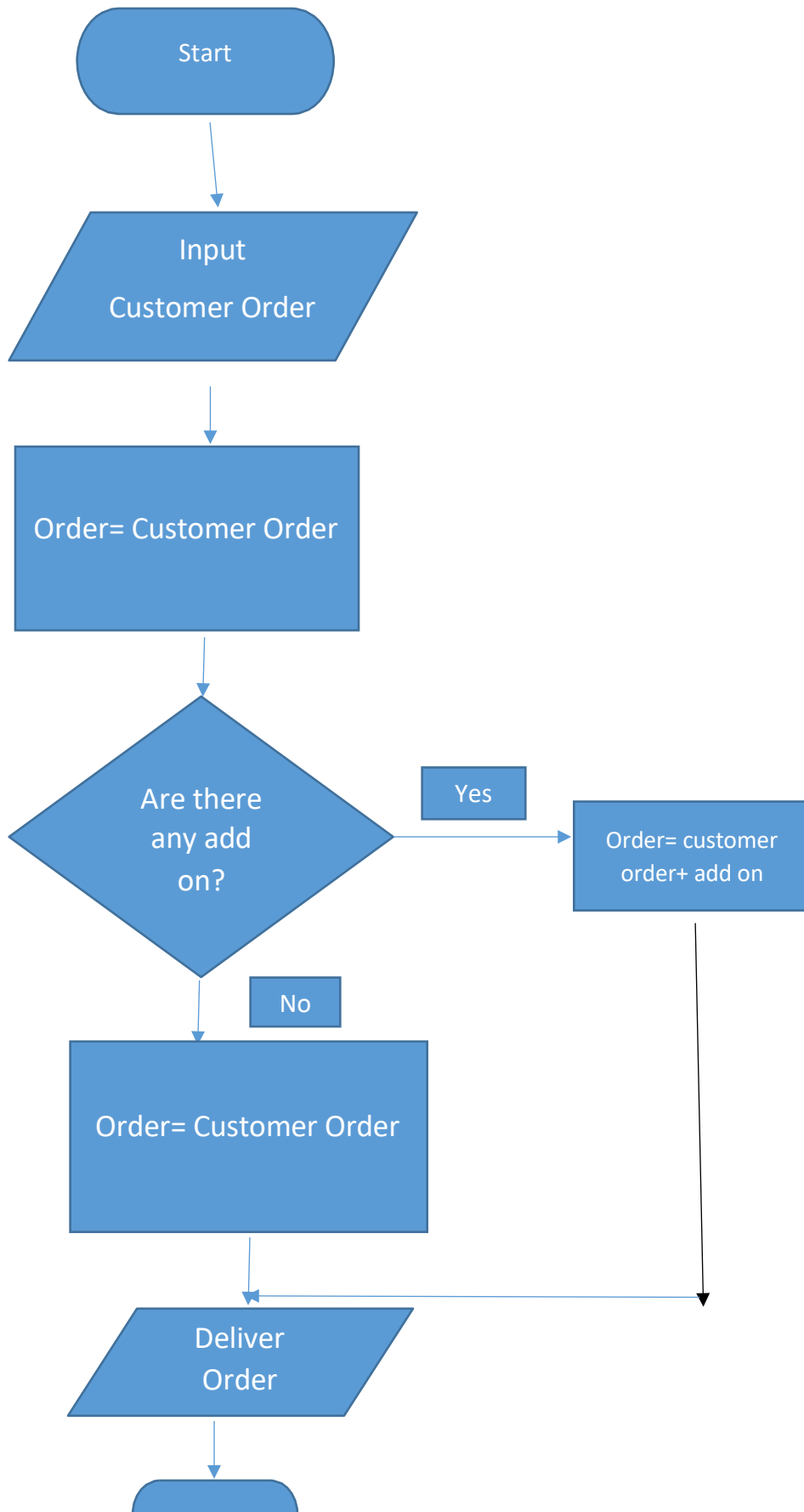
CALCULATE **Total Bill = Bill**

GET **Cash**

DISPLAY **ORDER TIME**

END

Flowchart:



Q#2.

Algorithm:

1. Ask the customer to enter the **Atm Card**
2. Read **Atm Card**
3. If **Atm Card** is Invalid then Display "Invalid account number"
4. Return **Atm**
5. Else Display "**How much amount you want to deposit**"
6. If amount exceeds Atm storage then display "**Insufficient balance**"
7. Else Give **Amount** and **Cash Receipt**

Pseudocode:

```
START
Input Atm Card
IF Account=Invalid
THEN print "Invalid Account"
RETURN Atm Card
ELSE
PRINT "Enter Amount"
IF Amount>Acc_Balance
THEN PRINT "Insufficient Balance"
ELSE
PRINT "Amount and Receipt"
END
```

Task# 3

Algorithm:

1. Input **num1 ,num2, num3**
2. Compare **num1** and **num2**
3. If **num1** is greater than **num2** and **num3**
4. Display **num1** is largest
5. ELSE If **num2** is greater than **num1** and **num3**
6. Display **num2** is largest
7. ELSE If **num3** is greater than **num1** and **num2**
8. Display **num3** is largest

Pseudocode:

```
INPUT Num1, Num2, Num3  
IF Num1>Num2 and Num1>Num3  
THEN PRINT "Num1 is greatest"  
ELSE IF Num2>Num3 and Num2>Num1  
THEN PRINT "Num2 is greatest"  
ELSE IF Num3>Num1 and Num3>Num2  
THEN PRINT "Num3 is greatest"  
ENDIF  
END
```

Task # 4

Algorithm:

1. Enter number from 1-12
2. IF number is less than 1 and greater than 12 then display "Incorrect number".
3. Else if **number==1** then display **January**.
4. Else if **number==2** then display **February**.
5. Else if **number==3** then display **March**.
6. Else if **number==4** then display **April**.
7. Else if **number==5** then display **May**.
8. Else if **number==6** then display **June**.
9. Else if **number==7** then display **July**.
10. Else if **number==8** then display **August**.
11. Else if **number==9** then display **September**.
12. Else if **number==10** then display **October**.
13. Else if **number==11** then display **November**.
14. Else if **number==12** then display **December**.

Q#5

Pseudocode:

Start

INPUT **num1**

INPUT **num2**

PRINT "enter operator "+" or "-". "

IF operator== + THEN

RESULT= **num1+num2**

ELSE IF operator== "- THEN

Result= **num1-num2**

ELSE

PRINT "Invalid Operator please enter correct operator"

ENDIF

END

Q#7

Algorithm:

1. Ask the user to enter **num_1** and **num_2** and the operator (+, -, *, /)
2. Read **num_1 num_2** and operator
3. IF operator is + the Result is **num_1 + num_2**
4. ELSE IF operator is - the Result is **num_1 - num_2**
5. ELSE IF operator is * the Result is **num_1 * num_2**
6. ELSE IF **num_2** is not equal to 0 and operator is / then result is **num_1 / num_2**
7. Else display "Invalid operator"
8. Display **Result**

Q#9

Why do we use .gitignore?

Exclude Unnecessary Files: Ignore files that are not needed in the repository, such as temporary files, build artifacts, and logs.

Protect Sensitive Information: Prevent sensitive files, like configuration files with passwords or API keys, from being tracked or shared.

Reduce Clutter: Keep the repository clean by avoiding the inclusion of files that are generated locally and not relevant to other contributors

Q#10

Difference between Algorithm and Pseudocode?

Algorithm	Pseudo Code
An algorithm is a 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.
Algorithms can be expressed using flowcharts, natural language, and other methods.	Pseudocode includes various control structures such as repeat-until, if-then-else, while, for, and case.

Q#6

Flowchart:

