Question 1

FIND IF THE NUMBER IS MULTIPLE OF 5

1 START
2 Input Number

3 If

4 Number%5=0

5 Print (Number is multiple of 5)

6 Else

7 Print (number is not multiple of 5)

8 End

Question 2

Check if a character is uppercase or lowercase

1 input (character between A&&Z)
3 IF
4 it is < Z
5 Print (character is lowercase)
6 If
7 It is > than A
8 Print (character is uppercase)
9 End

Question 3

Create a calculator which does addition or multiplication

1 Start
2 Input
3 Number 1
4 Number 2
5 Ask (if user want + or *)
6 If
7 Operation=multiply
8 Print (Num1 * Num2)
9 Else
10 Operation =+
11 Print (Num1 + Num2)
12 End

QUESTION 4

Check Wether the number is +,-, or 0

1 Start

2 input:

3 Number (x)

4 If

5 (x>0)

6 print (x=+ive)

7 if

8 (x<0)

9 print (x=-ive)

10 if

11 (x=0)

12 print x=0

13 End

Question 5

Check if a person is teenager (between 13 and 19)

1 Input

10 age=x
11 if
12 (x=13 or x<20)
13 Print (you are teenager)
14 Else
15 Print (you are not teenager)
16 End

Algorithm 1

Implement an algorithm to determine if a given year is a leap year. A leap year is divisible by 4, but not divisible by 100, except if it is also divisible by 400.

1 Ask user to enter year
2 If the year enter by the user is divisible by 4 it is leap year
Print (it is a leap year)
3 If the year enter by the user is divisible by 400 it is a leap year
Print (it is a leap year)
4 if the year enter by the user is not divisible by 100 it is not leap year
5 print (it is not leap year)
6 end

Algorithm 3

Write an algorithm to calculate x raised to the power y (i.e., x ^y) without using built-in

Power functions.

Start

1. Take two numbers **x** and **y as inputs**

2. **Take a variable result to 1**
3. **If: y=0 then return to result(because any variable with 0 as exponent is1)**
4. **If: y<0 then reciprocal x as 1/x and make y +ive**
5. **Make loops so that the x is * with itself y times to calculate required power (x*result y times)**
6. **End**

Algorithm 4

Calculate the area of a circle given its radius r.

Start

1. **Put radius r**
2. **Set value of pi(3.14)**
3. **Calculation**
   Formula: pi*radius*radius
4. **Print area**
5. **End**

Algorithm 5

Find the median of three given numbers.

Start

1. **Take three numbers Num1,Num2,Num3 as inputs**
2. **Process: (Arrange the numbers in ascending order)**
3. **The middle number is median (Num2)**
4. **Print the Num2 as output**
5. **End**

- **ALGORITHM 2:**

Implement an algorithm to count the number of occurrences of each character in a given string.

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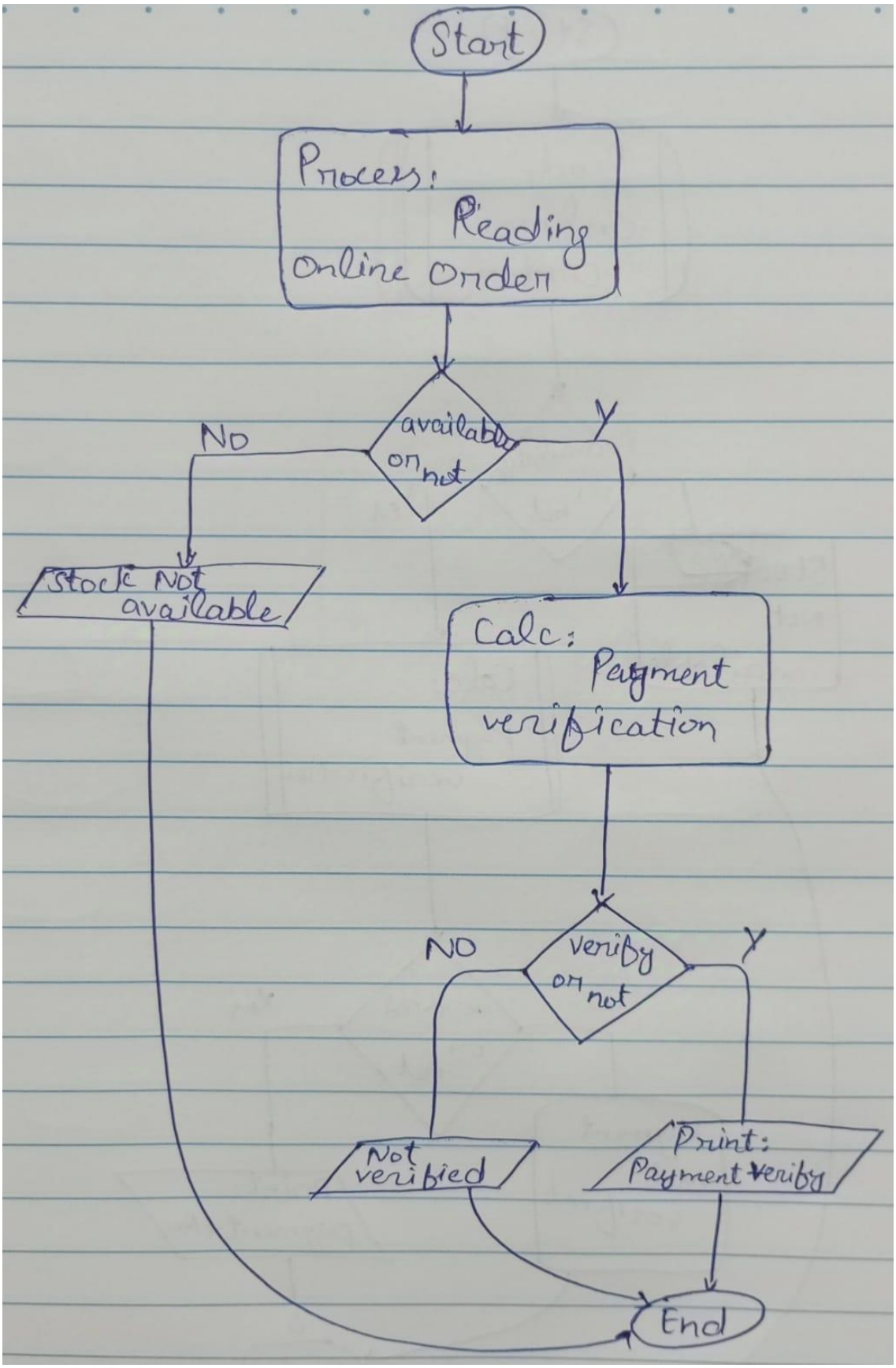
1 **Create an empty space to store the character counts**
2 **Read each character in the input one by one**
3 **Check if the character is already in the empty space created.**
4 **If the character is already in the space created, increment its count by 1**

5 **If the character is not in the space created, add it with a count of 1**
6 **Repeat steps 2-5 until all characters in the input string have been read.**
7 **Return the dictionary containing the character counts.**

Flow chart:


Start
Process:
Reading
Online Order
available
or not
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verification
verify
or not
NO
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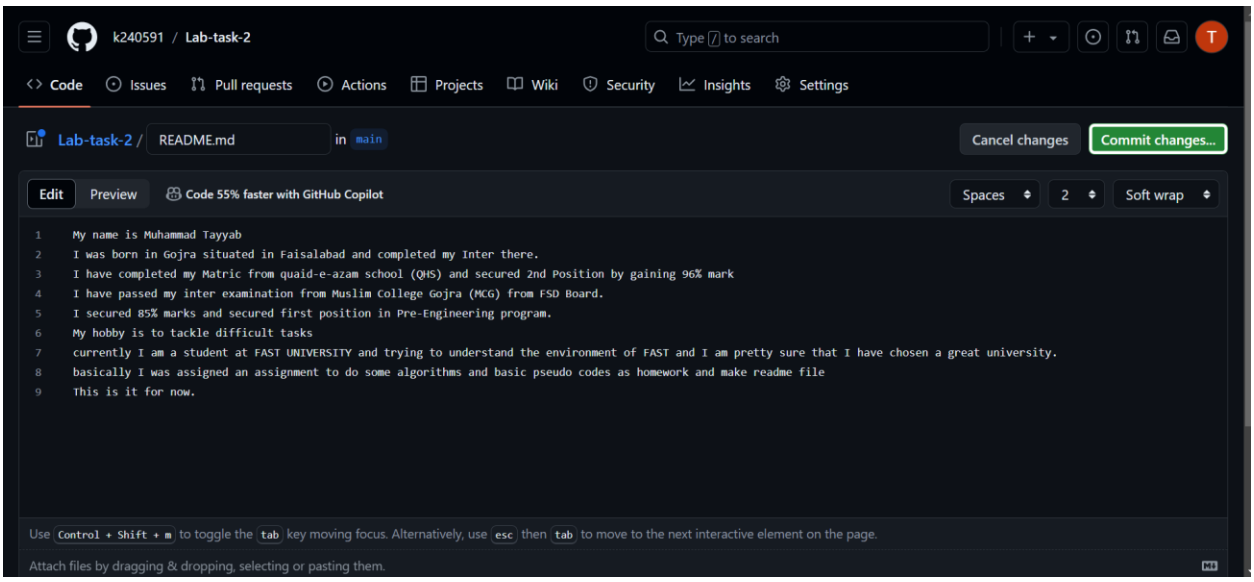
Not
verified
Print:
Payment verify
End


k240591 / Lab-task-2
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
Lab-task-2 / README.md in main
Cancel changes
Commit changes...
Edit
Preview
Code 55% faster with GitHub Copilot
Spaces
2
Soft wrap
1 My name is Muhammad Tayyab
2 I was born in Gojra situated in Faisalabad and completed my Inter there.
3 I have completed my Matric from quaid-e-azam school (QHS) and secured 2nd Position by gaining 96% mark
4 I have passed my inter examination from Muslim College Gojra (MCG) from FSD Board.
5 I secured 85% marks and secured first position in Pre-Engineering program.
6 My hobby is to tackle difficult tasks
7 currently I am a student at FAST UNIVERSITY and trying to understand the environment of FAST and I am pretty sure that I have chosen a great university.
8 basically I was assigned an assignment to do some algorithms and basic pseudo codes as homework and make readme file
9 This is it for now.
Use Control + Shift + m to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.
Attach files by dragging & dropping, selecting or pasting them.