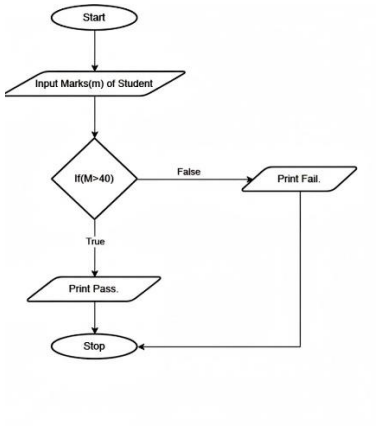
Problem Statement:-

Write a Python program to determine whether a student passed the exam or not based on their marks.

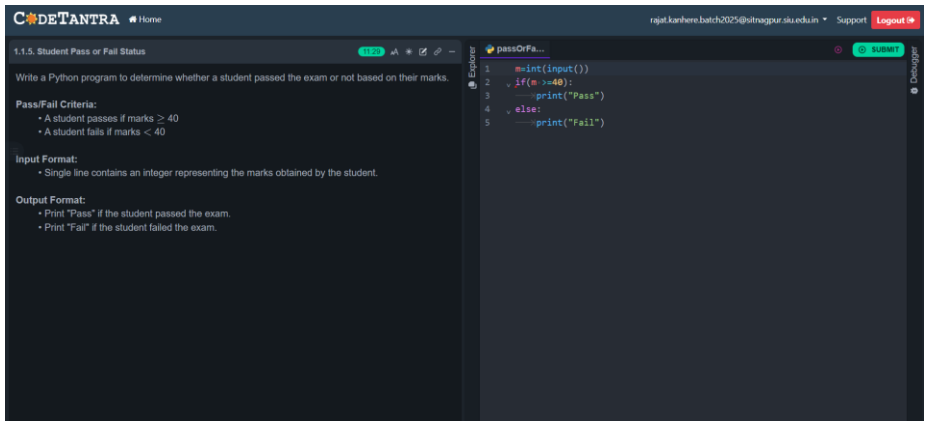
Algorithm:-

1. Start.
2. Read the marks obtained by the student.
3. If marks > 40 → Display “Pass”.
4. Else → Display “Fail”.
5. Stop.

Flowchart:-



Execution:-



Experiment 02:-

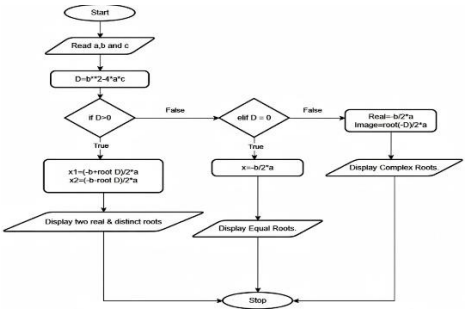
Problem Statement:-

Write a program to find the roots of a quadratic equation, given its coefficients a, b, and c. Use the quadratic formula: (-b+-root(b**2-4ac))/2a.

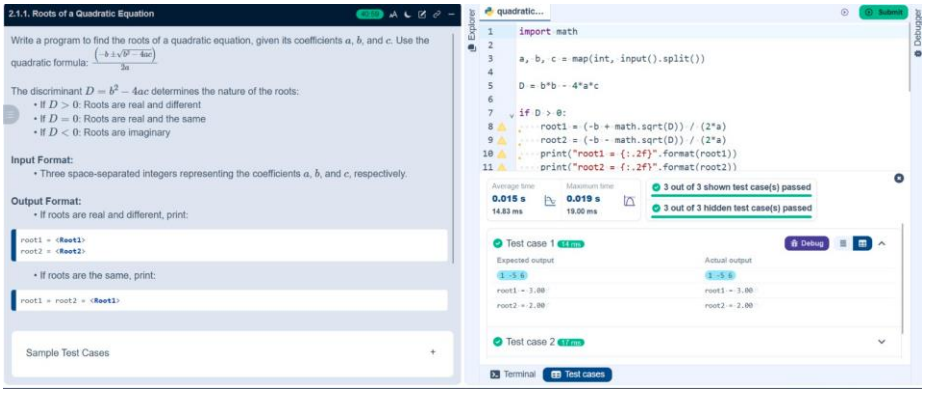
Algorithm:-

1. Start.
2. Read the coefficients a, b, and c.
3. Calculate the discriminant using:- $D=b\text{^}2-4ac$.
4. If D > 0 Compute:- $x1=(-b+\text{root}D)/2a$ and $x2=(-b-\text{root}D)/2a$ Display two real and distinct roots.
5. Else if D = 0 Compute:- $x=-b/2a$ Display equal real roots.
6. Else (D < 0) Compute:- Real part = $-b/2a$ Imaginary part = root(-D)/2a Display complex roots.
7. Stop.

Flowchart:-



Execution:-



Experiment 03:-

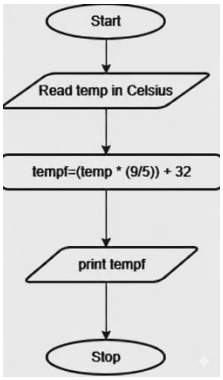
Problem Statement:-

Write a Python program to convert temperature from Celsius to Fahrenheit.

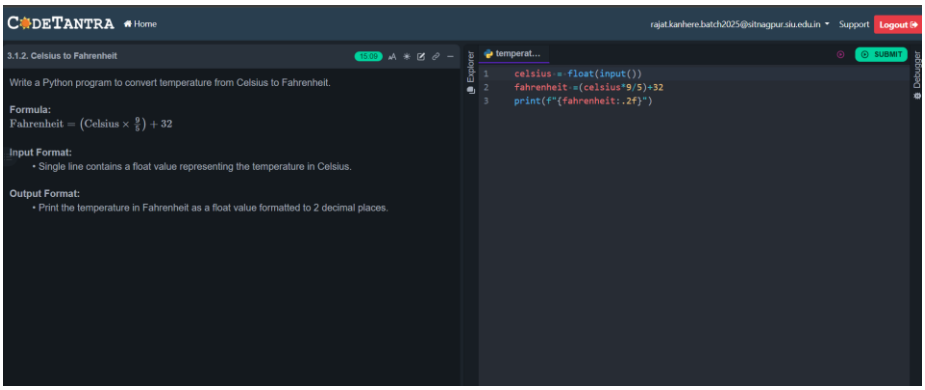
Algorithm:-

1. Start.
2. Input temperature in Celsius C.
3. Calculate Fahrenheit using the formula F = (C × 9/5) + 32.
4. Display the temperature in Fahrenheit.
5. Stop.

Flowchart:-



Execution:-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Support
Logout
3.1.2. Celsius to Fahrenheit
150
Write a Python program to convert temperature from Celsius to Fahrenheit.
Formula:
$\text{Fahrenheit} = (\text{Celsius} \times \frac{9}{5}) + 32$
Input Format:
• Single line contains a float value representing the temperature in Celsius.
Output Format:
• Print the temperature in Fahrenheit as a float value formatted to 2 decimal places.
temperat...
SUBMIT
Explorer
Debugger
1 celsius = float(input())
2 fahrenheit =(celsius*9/5)+32
3 print(f"{fahrenheit:.2f}")