Experiment 02:-
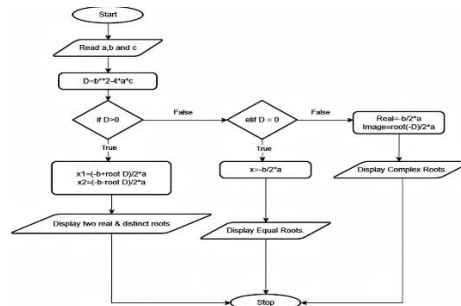
Problem Statement:-

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.
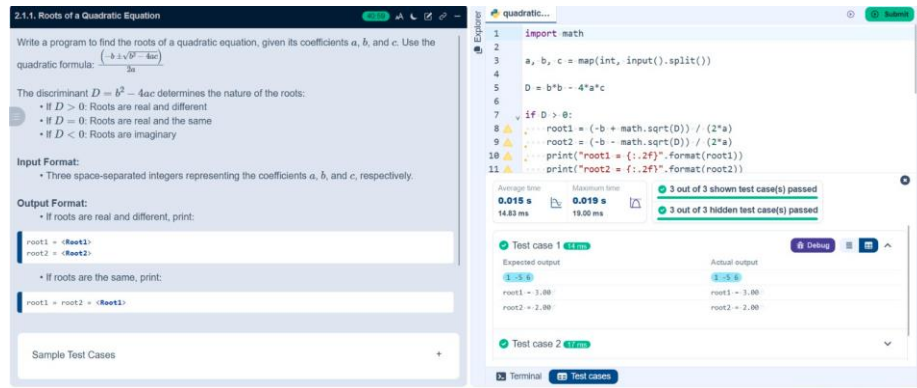
Algorithm:-

1. Start.

2. Read the coefficients a, b, and c.
3. Calculate the discriminant using:- $D=b^2-4ac$.

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 $=\text{root}(-D)/2a$ 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 $F = (C \times 9/5) + 32$.
4. Display the temperature in Fahrenheit.
5. Stop.

Flowchart:-