

Day 8 coding Statement: Write a program to find roots of a quadratic equation

Description: Get the values of a, b and c (coefficients of quadratic equation) as input from the user and calculate the roots and print as the output.

Input :

Enter the value of a, b and c : 1 -6 9

Output :

Roots are equal

Root 1= root 2 = 3.00

CODE:

```
import math
a, b, c = map(int, input("Enter 3 values for Quadratic Equation: ").split())
x1 = (-b + (math.sqrt((b*b)-4*a*c))) / (2*a);
x2 = (-b - (math.sqrt((b*b)-4*a*c))) / (2*a);
if x1 == x2:
    print("Roots are Equal \nRoot 1 = Root 2 = ", x1)
else:
    print("Roots are Not Equal \n Root 1 =", x1, ",\tRoot 2 =", x2)
```

OUTPUT:

```
Enter 3 values for Quadratic Equation: 1 -6 9
Roots are Equal
Root 1 = Root 2 = 3.0

Process finished with exit code 0
|
```

Enter 3 values for Quadratic Equation: 5 6 1

Roots are Not Equal

Root 1 = -0.2 , Root 2 = -1.0

Process finished with exit code 0

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