



C- Pool

problem 34

The roots of equation

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Example description

Write C code to compute the real roots of the equation: $ax^2+bx+c=0$.
The program will prompt the user to input the values of a, b, and c.
It then computes the real roots of the equation based on the following rules:-if a and b are zero=> no solution
-if a is zero=>one root $(-c/b)$
-if b^2-4ac is negative=>no roots

Otherwise=> two roots The roots can be computed using the following formula:

$$x1 = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

$$x2 = \frac{-b - \sqrt{b^2 - 4ac}}{2a}$$

Used library < math.h >

Expected Output

```
enter the value a:10  
enter the value b:5  
enter the value c:3  
no roots
```