

Programming Assignment 2:

Quadratic Equation Solver

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Firstly, print out the first two sentences

“Solving root of equation $a \cdot X^2 + b \cdot X + c = 0$.” and

“Please enter three integer coefficient a, b, and c:”.

And use “scanf” to input the value of a, b, and c.

Secondly, determine the solution cases of multiple real root, two real roots, and two complex roots.

Thirdly, not to print a term, if its coefficient is zero;

not to print the “+” sign, if coefficient b or c is

negative; not to print value 1 of coefficient a or b

and print only the necessary sign, if its value is 1 or

-1. Finally, judge the solution again to print out “is”

or “are” and the roots we get from the solution.

Also, if the discriminant is smaller than 0, we have

to multiply -1 into the square root to make the

value inside it become positive, then print “i” after

the value as square root -1 . By using these step, we can get a quadratic equation solver.