Report of assignment2

Jensen D1265209

First of all, I use long long int to declare the variables, also use double to store the root. Using do-while to make sure that the user does not enter the number equal 0. If a isn't 0, then continue the program. Declare the discriminant, discriminant = b^2-(4*a*c), so I want to judge the discriminant first. If discriminant = 0, there is only one root, which equal -b/(2*a). If discriminant > 0, there will be two roots, so name it root1 and root2. And, because the calculation of the root has +- inside, therefore it should be separated. Last, if discriminant < 0, it has real root and virtual root. I call the real root real, and virtual root imag.

After three kinds of result in discriminant, I must print equation by the number which enter before. Coefficient a go first, there are three situations. If A doesn't equal 1 or -1 just print the original number. And then is b, because inside the equation need plus sign, otherwise just print out the original number. Last one is c, just make sure if c equal to 0, and don't print out anything.

Last but not least, I have to print out the answer. The most important one is when discriminant smaller than 0, there are two situations, if real root equal to 0. The real root equal to 0 means that don't have to print out real part, so just print out imag.