

This homework assignment requires us to write a project with three codes. First, write a structure in "complex.h" for all the functions we need in this project. Second, write a "complex.c" to make all the functions work. Third, start to write the main function. Start the main function with a printf and printf to allow others to write down this equation's number. Fourth, write a lot of if and else if to print out the equation. Make sure that a and b shouldn't print out one and should just print out the variable. When printing out the negative number, make sure to print out the negative sign with a blank between the number. So, the result will look like what has been shown on the pdf. Fifth, write  $b^2 - 4ac$  as the discriminator. Use it to figure out whether the root has an imaginary quantity or not. Use printComplex to print out complex numbers. Sixth, change a,b, and c to complex number forms and use those to calculate "ans". make sure the absolute value of substituting a root to the quadratic equation is less than 0.000001. This homework assignment is not very hard. It was just very confusing at the start, so after spending some time, I finished the assignment.