

Vg101. Introduction to Computer and Programming (Fall 2018)

Homework #4

Assigned: 10/23/2018

Due: 10/30/2018

Notes for submission: We are going to use the online judge (OJ) to grade your homework, so please submit your homework in the OJ. For backup purpose, please also submit your homework to Canvas. Notice that we have ONLY ONE source file for the homework. You need to name the file using the format “[Your last name][Initial of your first name]_sYourID_hw4.c”. For example, the file submitted by the student Jigang Wu with ID#518370900000 for this homework assignment should be “WuJ_s518370900000_hw4.c”.

Homework problem: Write a program that can solve the quadratic equation $ax^2 + bx + c = 0$, given the user input of a, b, and c. Note that you should consider all the cases, including when the results are complex numbers. The following shows three example runs:

```
jigang@JI:~$ ./a.out
Please enter the coefficients: 1.5, 7.8, 2.1
Solutions: -0.284833, -4.91517
jigang@JI:~$ ./a.out
Please enter the coefficients: 1, 2, 3
Solutions: -1 + 1.41421i, -1 - 1.41421i
jigang@JI:~$ ./a.out
Please enter the coefficients: 1, 2, 1
Solution: -1
jigang@JI:~$
```