

Vg101. Introduction to Computer and Programming (Fall 2019)

Homework #4

Assigned: 21 OCT 2019

Due: 28 OCT 2019

Notes for submission: Please submit ONE C source file to Canvas for the problem. 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#123456789 for this homework assignment should be “WuJ_s123456789_hw4.c”.

Homework problem: Write a program that can solve the quadratic equation $ax^2 + bx + c = 0$ in the field of real numbers (you don’t need to consider complex solutions). You should ask for the user input of a, b, and c which are real numbers and then output the real solutions if exist, or output “no real solution”. Note that it is possible that $a = 0$, but let’s assume that a and b cannot be 0 at the same time. Please use the following formats for input and output:

Input:

```
printf("Please enter the coefficients: "); scanf("%lf, %lf, %lf", &a, &b, &c);
```

Output:

```
printf("Solutions: %g, %g\n", x1, x2); // two solutions
```

or

```
printf("Solution: %g\n", x1); // one solution
```

or

```
printf("No real solution!\n");
```