

Assignment 1 Report

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1 General Comments

Some students included `>>>` from the IDLE Console into your solution, causing them to fail, even though after removing the `>>>` answers would be correct. These symbols are there to prompt you to enter some Python statement to run (evaluate) and print out the answers - they are not part of the code.

It is heartening to see students using variables and functions to abstract your code, ie writing `solve_quadratic(a, b, c)` functions. Please keep it up as it is a good practice.

About style: just like writing English, good styling (ie. a space after punctuations, *exactly* one space between consecutive words) make the essay easy to read. In programming, we call it *Coding Style*. In Python we write variable/function names in Snake Case (ie. `the_third_letter`, `is_prime`) and so on. Using a IDE like VSCode or PyCharm means you can get auto-styling or style suggestions for free. Minor styling issues are commented.

2 Question 1

Most students got this part correct, some attempted to create a function that solves quadratic equations in general, but face one problem - how does

it return two different roots? Turns out, a function in Python can return multiple values!

```
from math import sqrt
def solve_quadratic(a, b, c):
    det = b * b - 4 * a * c
    return (-b + sqrt(det))/2/a, (-b - sqrt(det))/2/a
ans1, ans2 = solve_quadratic(a, b, c)
```

3 Question 2

All students got this part correct with very few exceptions.

4 Question 3

All students got this part correct. Some students deployed loops or functions to abstract, although loops made more sense, since a function that draws a line then turns 36 degrees is hardly reusable in other cases.