

Before I started coding I refreshed myself on geometry, since that's something I haven't touched since freshman year of high school. I also outlined my code on my iPad to understand the direction I should go when I started coding. I checked for duplicate points and co-linearity as my first if statement. This is so I can weed out the results that will not result in a triangle output first. I picked the order of triangles to check following the basis of the likelihood that a triangle would be encountered. Isosceles and equilateral triangles have conditions that are generally easy to check for and fairly generic, making them the easiest to check first. I struggled a lot with this assessment and figuring out the nested if/elif statements, and as such I rewrote many conditionals to get the test cases to pass. My program was finished once I passed a majority of the test cases and couldn't find what was causing the failing test case.