T(n) =

Line #142-160: c\*1

O(n) = O(1)

The algorithm I used is based on reframing the problem. First we assume the first plane’s location as the origin and its direction as the horizontal positive axis. From here I used the trig identity of tan(theta) = x/y to derive a second set of points from the angle of the heading. With a second set of points I was able to find the slope of the line and more importantly the y-intercept. Converting from point slope form yields: y=mx-m+ with m+ as the y-intercept. If the intercept is greater than or equal to 0 it must intersect with the other plane’s heading.





