

# One-Day Assignment 7 – algorithmic solution

Weak Vertices

# One Day Assignment 7 – English Description

Use an array to mark whether a vertex is part of a triangle or not. Initially, all of them are set to false

Try all possible permutations of 3 vertices and see if they form a triangle. This can be achieved by the following:

Use a total of 3 nested for-loops from 1 to n

For each iteration, check that the 3 values(a, b, c) in the loops are distinct. If they are all distinct, then lookup the adjacency matrix for whether the edges (a, b), (a, c), and (b, c) exist

If they do exist, then set a, b, and c in the array to true

At the end, output all vertices that are not part of a triangle (value of false in the array)