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In [2]:  # making complement graphs:
         #This funtion produces the matrix form of the complement graph, by turnin
         # and the zeros to onese leaving the diagonal as zeros

         # I want a list of rows and columns where the first column is the edge se
         # the second row is the
         import numpy as np

         #pass through a single adjacency matrics
         def complement_graphs(adj_mat):
             #make the ones zeros and the zeros ones

             n = len(adj_mat)
             a = np.zeros((n,n)).tolist()

             for i in range(n):
                 for j in range(n):
                     if i != j:
                         if adj_mat[i][j] == 1:
                             a[i][j] = 0
                         elif adj_mat[i][j] == 0:
                             a[i][j] = 1
                     else:
                         a[i][j] = 0

             return a

In [ ]:
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