

Question 3:

All the interns and employee are numbered from 1 to n. we can add them to the tables in such a way that every employee's preference is added from 1 to n in the table. E.g.

Employee 1 2 3 4

Intern 1 2 3 4 7

Intern 2 1 9 6 8

This is a kind of an adjacency matrix and if you want to find that which intern prefers which employee we can simply write $\text{matrix}[i][j] < \text{matrix}[i][y]$ and would get the answer.

Space complexity: $O(n^2)$

Time complexity: $O(1)$

