

## CSE 321 Homework-5

**Q1-)** Don't try every possible sequence of job. Sort given jobs list according to weight/time rate. And then compute weighted complexity time according to sorted job list. Bubble sort used while sorting. So total running time of function is  $O(n^2)$  which  $n$  is equal to number of job.

**Q2-)** In part a, given algorithm compute incorrect optimum cost and we show that via an example. Algorithm considers only monthly cost and doesn't consider moving cost between cities. Total running time of function is  $O(n)$  which  $n$  is equal to number of month.

In part b, choose minimum of current city's monthly cost and moving cost plus other city's monthly cost. Then carry and add new cost every month this cost until end of list. Finally choose minimum of cost of NY and SF . Total running time of function is  $O(n)$  which  $n$  is equal to number of month.