*You are given two sets A and B, each containing n integers. You can choose to reorder each set however you like. After reordering, let A[i] be the i-th element of set A, and let B[i] be the i-th element of set B. You will then be charged an amount equal to Pn i=1 A[i] ∗ B[i]. Give an algorithm that will minimize your charges. Prove that your algorithm minimizes the charges and state its running time.*

Psuedo Code:

1.Create two Arrays a and Array b,

2.Sort Array a (in ascending order)

3. Sort Array b (in Descending order)

4. int sum=0;

for(int i=0;i<a.length;i++) {

sum+=a[i]\*b[i]; } 5. print sum