You are given the Cartesian coordinates of n points of interest in Rd. You are asked to \_nd the

two points xi; xj among those such that jjxi 􀀀 xj jj2 is minimal.

Problem 4: Improvement (2 points)

Improve the algorithm to O(n log n). Prove that your modi\_ed algorithm has the correct

complexity. Hint: Use proper pre-computations.

Problem 5: Non-Euclidean distances (1 point)

Is the complexity di\_erent if we choose the k:k1 or k:k1 distance instead of the Euclidean

distance?