

CS282K: Numerical Methods for Scientific Computing and Machine Learning

Homework 5

Issued: September 25

Due: October 13 (11:59PM, Beijing time)

Please submit the PDF file of your solution to the “Drop Box” on Sakai.

Problem 1: Lagrange Dual

Find the dual problem of the following optimization.

$$\begin{array}{ll} \min_{x,y} & x^2 + y^2 \\ S.T. & x + y = 1 \end{array} \quad (1)$$