

**Math 428, Homework 4**

**Problem 1.** Let  $k$  be a field. Let  $(a_1, \dots, a_n) \in \mathbb{A}_k^n$ . Prove that the ideal  $(x_1 - a_1, \dots, x_n - a_n) \subset k[x_1, \dots, x_n]$  is maximal.