Analysis of Algorithms: Assignment 1

Due date: September 2 (Thursday)

Problem 1 (5 points)
Give an algorithm that determines the number of *distinct* elements in an integer array $A[1..n]$. For example, if the input array is $\langle 4, 1, 4, 6, 1 \rangle$, the algorithm must return 3, since this array has three distinct elements.

Problem 2 (5 points)
Estimate the worst-case running time of your algorithm, using the technique described in class.