

Inlab Supplement

CSCI 111

Sorting Strategy

Sort your array by passing through it an undetermined number of times.

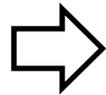
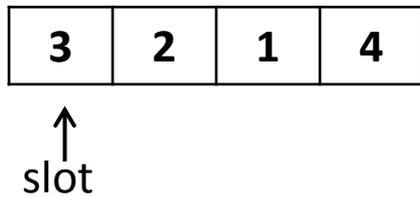
Each iteration through the array, compare the current slot to the next slot and swap* the values if the value in the current slot is greater than the value in the next slot.

Keep doing passes through the array until the array is sorted (how can you tell when it is sorted?).

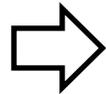
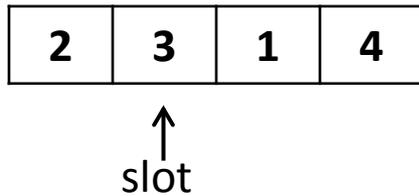
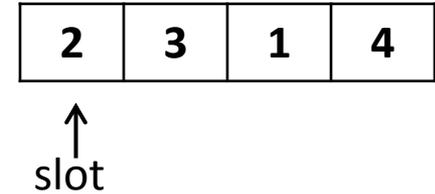
*not hard to do, get creative with a temporary local variable.

Sorting Example

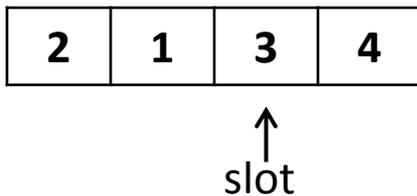
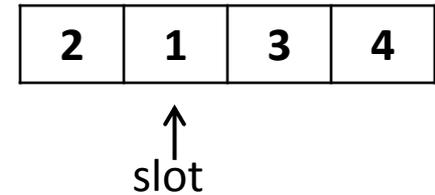
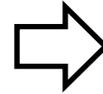
Pass 1



Since $3 > 2$, the array goes to:



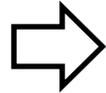
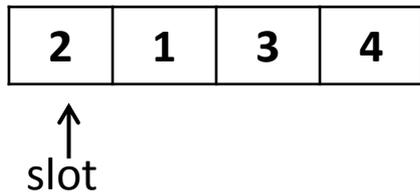
Since $3 > 1$, the array goes to:



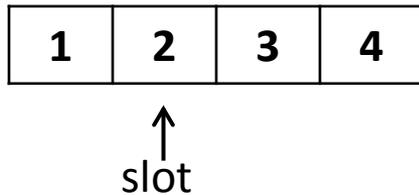
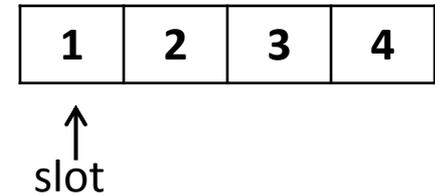
$3 \ngtr 4$, so the array stays the same

Sorting Example

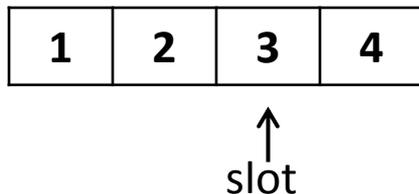
Pass 2



Since $2 > 1$, the array goes to:



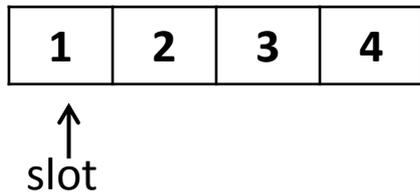
Since $2 \ngtr 2$, the array stays the same



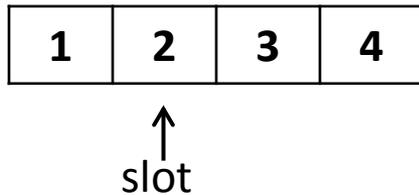
Since $3 \ngtr 4$, the array stays the same

Sorting Example

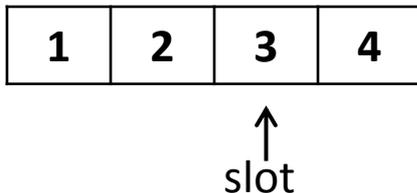
Pass 3



Since $1 \ngtr 2$, the array stays the same



Since $2 \ngtr 2$, the array stays the same



Since $3 \ngtr 4$, the array stays the same

Therefore, since no changes were made in this entire pass, the array must be sorted.