

# LESSON 38 NOTES

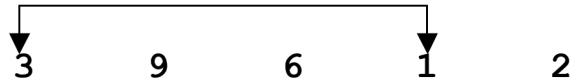
## The Selection Sort Algorithm

Precondition: Values in array are primitives

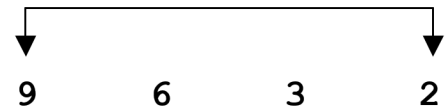
- 1) Scan the array (list) of values to find the smallest value
  - 2) Swap value with the first value in the list
  - 3) Scan the rest of the list (except the first value) to find the smallest value
  - 4) Exchange this value with the second in the list
  - 5) Repeat #3 and #4 until you get to the last position in the list
- 

### An Example:

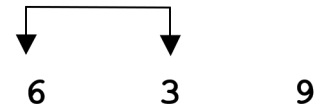
Scan right starting with 3.  
1 is the smallest.  
Exchange 1 and 3.



Scan right starting with 9.  
2 is the smallest.  
Exchange 9 and 2.



Scan right starting with 6.  
3 is the smallest.  
Exchange 6 and 3.



Scan right starting with 6.  
6 is the smallest.  
Exchange 6 and 6.

