

## **SELECTION SORT ALGORITHM**

1. Declare an Array A with default values.
2. Set  $n = \text{length of } A$
3. Set  $i = 0$
4. While ( $i < n$ )
  - a. Set  $\text{smallest} = A[i]$
  - b. Set  $\text{smallest\_ind} = i$
  - c. While ( $j < n$ )
    - i. If ( $A[j] < \text{smallest}$ )
      1.  $\text{smallest} = A[j]$
      2.  $\text{smallest\_ind} = j$
    - ii.  $j = j + 1$
  - d. if ( $i \neq j$ )
    - i. set  $\text{temp} = A[\text{smallest\_ind}]$
    - ii.  $A[\text{smallest\_ind}] = A[i]$
    - iii.  $A[i] = \text{temp}$
  - e.  $i = i + 1$
5. print Array A
6. Exit