

Selection Sort

Scan the array to find its smallest element and swap it with first element.

On pass i ($0 \leq i \leq n-2$) find the smallest element $A[i \dots n-1]$ and swap it with $A[i]$.

7 3 2 6 1 9 5

1 3 2 6 7 9 5

1 2 3 6 7 9 5

1 2 3 5 6 7 9

for $i = 0$ to $n-2$ do

$min = i$

 for $j = i+1$ to $n-1$ do

 if $A[j] < A[min]$

$min = j$

 swap $A[i]$ and $A[min]$