**Selection Sort Exercise**

Selection sort steps

* **The smallest value in the array is located and moved to element 0.**
* **Then the next smallest value is located and moved to element 1.**
* **This process *continues* until all of the elements have been placed in their proper order**

Sort process example

(Finish charting all the sort results below. Origin of array in bold is on left hand side. First pass

through the outer loop and last pass thru the outer loop has been filled in.)

O u t e r f o r l o o p (searches thru **n-1** items)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 1 |  |  |  |  |  |  |  | 1 |
| 44 | 44 |  |  |  |  |  |  |  | 2 |
| 2 | 2 |  |  |  |  |  |  |  | 5 |
| 5 | 5 |  |  |  |  |  |  |  | 5 |
| 6 | 6 |  |  |  |  |  |  |  | 6 |
| 7 | 7 |  |  |  |  |  |  |  | 7 |
| 12 | 12 |  |  |  |  |  |  |  | 12 |
| 1 | 5 |  |  |  |  |  |  |  | 16 |
| 99 | 99 |  |  |  |  |  |  |  | 44 |
| 16 | 16 |  |  |  |  |  |  |  | 99 |