

Selection Sort $\rightarrow O(n^2)$

\Rightarrow Selection Sort is a simple sorting algorithm that finds the smallest element in the array and swaps it with the element in the first position, then find the second smallest element and swaps it with the element in the second position and continue this till the entire array is sorted.

Example: [3, 1, 5, 2]

Step-1:- Smallest element is 1. We swap it with the first element

[1, 3, 5, 2]

Step-2:- the second smallest element is 2 swap it with the second element

[1, 2, 5, 3]

Step-3:- the third smallest element is 3 swap it with third element

[1, 2, 3, 5]

↑
the Array is now sorted