User Documentation

Selection-Sort Visualizer

The software is Developed on Microsoft Visual studio 2013 using Visual basic. For best experience we advise users to follow some basic guidelines:

- 1. The valid range of an Integer variable is -2147483648 through +2147483647.
- 2. The valid range of a Decimal variable is +/-7.9228162514264337593543950335 with 28 places to the right of the decimal.

If user won't follow guidelines 1 or 2, we will throw a warning and program will reset.

User has to provide the size of array("INTEGER"), Elements he/she wants to sort in "SPACE SEPERATED DECIMALS" and has to select the order either Ascending or Descending order .By default the order is ascending order.

User should check the above conditions properly before hitting the **SORT** button, as if any one of the condition fails will lead to wrong output or **RESET** or Termination of the program.

Hitting the **EXIT** command will lead to termination of the command.

User can enter only array entries "space separated" Decimals.

Visualization:

For better animation effects User should enter <10 Decimals as input.

TWO MODES OF VISUALIZATION:

- 1. ARRAY
- 2. GRAPH

Red node represents the current element.

Yellow node represents the node having minimum value in that specific iteration.

White nodes are the nodes containing values greater than the minimum value of element in one pass of array.

Swapping of red and yellow nodes of array is shown just below the animated array for better understanding.

A proper delay is given for comparison of the numbers for better visualization.