

# Visualizing Data Structures

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## 1 Compilation

sorting.html and searching.html should run on any HTML5 compatible browser with no additional steps required.

## 2 Sorting.html

You can sort the top and bottom lists simultaneously, which is analogous to projecting the points along a diagonal line

### 2.1 Inputs

- radio buttons - Which sort you want to perform on the top and the bottom sets
- size - The size of the data set...

### 2.2 Buttons

- sort - performs the selected sorting operation on both sets. DO NOT PRESS IT MORE THAN ONCE. Java script timeouts will add up and make the sort meaningless
- randomize - generates new data points
- nearly sorted - makes the arrays sorted except for a few points
- sort top, sort bottom - self explanatory

## 3 Searching.html

You can either search for a specific value or a position in the sorted list (the kth element)

### 3.1 Inputs

- radio buttons - Which sort you want to perform on the top and the bottom sets
- size - The size of the data set
- find value - the value (height of pixel) to find in either list
- find Kth - the position in the list to find...

### 3.2 Buttons

- search - performs the selected searching operation on both sets. DO NOT PRESS IT MORE THAN ONCE. Java script timeouts will add up and make the search meaningless
- select - performs the selected selection operation on both sets. DO NOT PRESS IT MORE THAN ONCE. Java script timeouts will add up and make the select meaningless
- randomize - generates new data points
- sort top, sort bottom - self explanatory...