| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/AnimationPanel.html)   [**NEXT CLASS**](http://docs.google.com/ButtonPanel.html) | [**FRAMES**](http://docs.google.com/index.html?ArraySorter.html)    [**NO FRAMES**](http://docs.google.com/ArraySorter.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## Class ArraySorter

[java.lang.Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)  
 **ArraySorter**

public class **ArraySorter**extends [Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)

Class ArraySorter has an array and can do different sorts on it

**Author:** Barb Ericson

| **Constructor Summary** | |
| --- | --- |
| [**ArraySorter**](http://docs.google.com/ArraySorter.html#ArraySorter(int%5B%5D))(int[] theArray)            Constructor that takes the array to sort |

| **Method Summary** | |
| --- | --- |
| void | [**insertionSort**](http://docs.google.com/ArraySorter.html#insertionSort())()            Method to do an insertion sort on the array |
| static void | [**main**](http://docs.google.com/ArraySorter.html#main(java.lang.String%5B%5D))([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true)[] args) |
| void | [**mergeSort**](http://docs.google.com/ArraySorter.html#mergeSort())()            Method to do a merge sort of the array |
| int | [**partition**](http://docs.google.com/ArraySorter.html#partition(int,%20int))(int left, int right)            Method to partition the array around a pivot point. |
| void | [**quicksort**](http://docs.google.com/ArraySorter.html#quicksort(int,%20int))(int from, int to)            Do the quicsort on the array from the passed from to the passed to indicies |
| void | [**selectionSort**](http://docs.google.com/ArraySorter.html#selectionSort())()            Method to do a selection sort on the array |
| static void | [**testInsertionSort**](http://docs.google.com/ArraySorter.html#testInsertionSort())()            Method to test insertion sort |
| static void | [**testMergeSort**](http://docs.google.com/ArraySorter.html#testMergeSort())() |
| static void | [**testQuicksort**](http://docs.google.com/ArraySorter.html#testQuicksort())() |
| static void | [**testSelectionSort**](http://docs.google.com/ArraySorter.html#testSelectionSort())()            Method to test selection sort |

| **Methods inherited from class java.lang.**[**Object**](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true) |
| --- |
| [clone](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#clone()), [equals](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#equals(java.lang.Object)), [finalize](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#finalize()), [getClass](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#getClass()), [hashCode](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#hashCode()), [notify](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notify()), [notifyAll](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notifyAll()), [toString](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#toString()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long)), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### ArraySorter

public **ArraySorter**(int[] theArray)

Constructor that takes the array to sort

**Parameters:**theArray - the array to sort

| **Method Detail** |
| --- |

### selectionSort

public void **selectionSort**()

Method to do a selection sort on the array

### testSelectionSort

public static void **testSelectionSort**()

Method to test selection sort

### insertionSort

public void **insertionSort**()

Method to do an insertion sort on the array

### testInsertionSort

public static void **testInsertionSort**()

Method to test insertion sort

### mergeSort

public void **mergeSort**()

Method to do a merge sort of the array

### testMergeSort

public static void **testMergeSort**()

### quicksort

public void **quicksort**(int from,  
 int to)

Do the quicsort on the array from the passed from to the passed to indicies

**Parameters:**from - the index to start fromto - the index to stop at

### partition

public int **partition**(int left,  
 int right)

Method to partition the array around a pivot point.

**Parameters:**left - the left indexright - the right index **Returns:**the index of the pivot point all element in the array with an index less than the returned index are less than the value at the pivot index and all values in the array with an index the pivot value are to the right of the pivot index

### testQuicksort

public static void **testQuicksort**()

### main

public static void **main**([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true)[] args)

| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
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