Package
sorter

sorter
Class DanceSorter

```
java.lang.Object
   |
   +-sorter.DanceSorter
```

All Implemented Interfaces:
ISorter

---

public class **DanceSorter**
extends java.lang.Object
implements ISorter

This class rebuild the YouTube dance sorter
See Also:
`http://www.youtube.com/watch?v=ywWBy6J5gz8`

Constructor Summary

public	DanceSorter()

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) Sort the given array ascending.

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods inherited from interface `sorter.ISorter`

`getArrayAccessCounter, getSorterName, sort`

Constructors

DanceSorter

`public DanceSorter()`

Methods

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sort

```
public void sort(int[] a)
```

Sort the given array ascending.

Parameters:

a - An array of the items to sort

---

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:

A string with the name of the sort alorithm

---

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:

Returns a amount of array accesses

sorter
Class FileWriterHtml

```
java.lang.Object
   |
   +-sorter.FileWriterHtml
```

public class **FileWriterHtml**
extends java.lang.Object

This class provides methods to write some HTML into a file Used to generate a HTML page for comparing the various sort alorithm

Constructor Summary

public	`FileWriterHtml()`

Method Summary

void	`createNewFile(java.lang.String filename)` Creates a new file.
static void	`generateHTML(char codePart)` Outputs some predefined HTML-Tags Values for codePart are: - h: header part of html file - f: footer part of html file
static void	`writeLn(java.lang.String code)` Writes a line of text into a given file

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

FileWriterHtml

`public FileWriterHtml()`

Methods

createNewFile

`public void createNewFile(java.lang.String filename)`

Creates a new file. If the file exits, it will be deleted

Parameters:

`String` - filename

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Returns:
void

generateHTML

```
public static void generateHTML(char codePart)
```

Outputs some predefined HTML-Tags Values for codePart are: - h: header part of html file - f: footer part of html file

Parameters:
`char` - codePart

Returns:
void

writeLn

```
public static void writeLn(java.lang.String code)
```

Writes a line of text into a given file

Parameters:
`String` - code

Returns:
void

sorter
Class HeapSorter

```
java.lang.Object
   |
   +-sorter.HeapSorter
```

All Implemented Interfaces:
ISorter

---

public class **HeapSorter**
extends java.lang.Object
implements ISorter

This class implements a heap sorter

Constructor Summary

public	HeapSorter()

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) Sort the given array ascending.

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods inherited from interface `sorter.ISorter`

`getArrayAccessCounter, getSorterName, sort`

Constructors

HeapSorter

```
public HeapSorter()
```

Methods

(continued from last page)

sort

```
public void sort(int[] a)
```

Sort the given array ascending.

Parameters:

a - An array of the items to sort

---

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:

A string with the name of the sort alorithm

---

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:

Returns a amount of array accesses

sorter
Class InsertionSorter

```
java.lang.Object
   |
   +-sorter.InsertionSorter
```

All Implemented Interfaces:
ISorter

---

public class **InsertionSorter**
extends java.lang.Object
implements ISorter

This class implements a insertion sorter

Constructor Summary

public	InsertionSorter()

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) Sort the given array ascending.

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods inherited from interface `sorter.ISorter`

`getArrayAccessCounter, getSorterName, sort`

Constructors

InsertionSorter

```
public InsertionSorter()
```

Methods

(continued from last page)

sort

```
public void sort(int[] a)
```

Sort the given array ascending.

Parameters:

a - An array of the items to sort

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:

A string with the name of the sort alorithm

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:

Returns a amount of array accesses

sorter
Interface ISorter

All Known Implementing Classes:
DanceSorter, HeapSorter, InsertionSorter, MergeSorter, QuickSorter, QuickSorterIterativ

---

public interface **ISorter**
extends

This is an interface of a sorter

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) An abstract sort method.

Methods

sort

```
public void sort(int[] a)
```

An abstract sort method.

Parameters:
a - An array of the items to sort

---

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:
A string with the name of the sort alorithm

---

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:
Returns a amount of array accesses

sorter
Class MergeSorter

```
java.lang.Object
   |
   +-sorter.MergeSorter
```

All Implemented Interfaces:
ISorter

---

public class **MergeSorter**
extends java.lang.Object
implements ISorter

This class implements a merge sorter

Constructor Summary

public	MergeSorter()

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) Sort the given array ascending.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface sorter.ISorter

getArrayAccessCounter, getSorterName, sort

Constructors

MergeSorter

```
public MergeSorter()
```

Methods

(continued from last page)

sort

```
public void sort(int[] a)
```

Sort the given array ascending.

Parameters:

a - An array of the items to sort

---

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:

A string with the name of the sort alorithm

---

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:

Returns a amount of array accesses

sorter
Class QuickSorter

```
java.lang.Object
   |
   +-sorter.QuickSorter
```

All Implemented Interfaces:
ISorter

---

public class **QuickSorter**
extends java.lang.Object
implements ISorter

This class implements a recursiv quick sorter

Constructor Summary

public	QuickSorter()

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) Sort the given array ascending.

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods inherited from interface `sorter.ISorter`

`getArrayAccessCounter, getSorterName, sort`

Constructors

QuickSorter

```
public QuickSorter()
```

Methods

(continued from last page)

sort

```
public void sort(int[] a)
```

Sort the given array ascending.

Parameters:

a - An array of the items to sort

---

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:

A string with the name of the sort alorithm

---

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:

Returns a amount of array accesses

sorter
Class QuickSorterIterativ

```
java.lang.Object
   |
   +-sorter.QuickSorterIterativ
```

All Implemented Interfaces:
ISorter

---

public class **QuickSorterIterativ**
extends java.lang.Object
implements ISorter

This class implements a iterativ quick sorter

Constructor Summary

public	QuickSorterIterativ()

Method Summary

long	getArrayAccessCounter() Returns the amount of array accesses
java.lang.String	getSorterName() Returns the name of the sort algoritm
void	sort(int[] a) Sort the given array ascending.

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods inherited from interface `sorter.ISorter`

`getArrayAccessCounter, getSorterName, sort`

Constructors

QuickSorterIterativ

```
public QuickSorterIterativ()
```

Methods

(continued from last page)

sort

```
public void sort(int[] a)
```

Sort the given array ascending.

Parameters:

a - An array of the items to sort

---

getSorterName

```
public java.lang.String getSorterName()
```

Returns the name of the sort algoritm

Returns:

A string with the name of the sort alorithm

---

getArrayAccessCounter

```
public long getArrayAccessCounter()
```

Returns the amount of array accesses

Returns:

Returns a amount of array accesses

sorter
Class Sort

```
java.lang.Object
   |
   +-sorter.Sort
```

public class **Sort**
extends java.lang.Object

With this class we call the various sort algorithm and compare it. Writes the result for comparing in a HTML file

Constructor Summary

public	Sort()

Method Summary

static void	main(java.lang.String[] args)

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

Sort

`public Sort()`

Methods

main

`public static void main(java.lang.String[] args)`