

# Class HuffmanTree

java.lang.Object  
HuffmanTree

```
public class HuffmanTree
extends java.lang.Object
```

## Constructor Summary

### Constructors

#### Constructor and Description

`HuffmanTree`(java.util.TreeMap<java.lang.Character, java.lang.Integer> frequencies)  
build a Huffman tree using the given characters and corresponding frequencies

## Method Summary

All Methods   Instance Methods   Concrete Methods

Modifier and Type	Method and Description
char	<code>decode</code> (java.lang.String code) decode the code
java.lang.String	<code>encode</code> (char symbol) recursive method binary encoding of the given symbol using binary characters 'o' and 'i'
java.lang.String	<code>encodeLoop</code> (char symbol) binary encoding of the given symbol using binary characters 'o' and 'i'
char	<code>readCode</code> (BitInputStream stream) read the next symbol of binary encoding individual bits from BitInputStream and return the corresponding characters
boolean	<code>writeCode</code> (char symbol, BitOutputStream stream) write the individual bits of the given symbol using encoding to bitOutputStream

### Methods inherited from class java.lang.Object

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

## Constructor Detail

### HuffmanTree

```
public HuffmanTree(java.util.TreeMap<java.lang.Character, java.lang.Integer> frequencies)
```

build a Huffman tree using the given characters and corresponding frequencies

**Parameters:**

frequencies – the corresponding frequencies of given character

## Method Detail

### encodeLoop

```
public java.lang.String encodeLoop(char symbol)
```

binary encoding of the given symbol using binary characters '0' and '1'

**Parameters:**

symbol – the given symbol

**Returns:**

the string of binary encoding

### encode

```
public java.lang.String encode(char symbol)
```

recursive method binary encoding of the given symbol using binary characters '0' and '1'

**Parameters:**

symbol – the given symbol

**Returns:**

the string of binary encoding

### decode

```
public char decode(java.lang.String code)
```

decode the code

**Parameters:**

code – the given code

**Returns:**

the symbol of corresponding to the given code

**writeCode**

```
public boolean writeCode(char symbol,
                        BitOutputStream stream)
```

write the individual bits of the given symbol using encoding to bitOutputStream

**Parameters:**

symbol – the given symbol

stream – the output stream

**Returns:**

return true if written success

**readCode**

```
public char readCode(BitInputStream stream)
```

read the next symbol of binary encoding individual bits from BitInputStream and return the corresponding characters

**Parameters:**

stream – the input stream

**Returns:**

the corresponding character

[PACKAGE](#) [CLASS](#) [USE](#) [TREE](#) [DEPRECATED](#) [INDEX](#) [HELP](#)

[PREV CLASS](#) [NEXT CLASS](#) [FRAMES](#) [NO FRAMES](#) [ALL CLASSES](#)

[SUMMARY: NESTED](#) | [FIELD](#) | [CONSTR](#) | [METHOD](#) [DETAIL: FIELD](#) | [CONSTR](#) | [METHOD](#)