| | [**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/SimpleTurtle.html)   [**NEXT CLASS**](http://docs.google.com/SoundException.html) | [**FRAMES**](http://docs.google.com/index.html?Sound.html)    [**NO FRAMES**](http://docs.google.com/Sound.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#35nkun2) |

## Class Sound

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

public class **Sound**extends [SimpleSound](http://docs.google.com/SimpleSound.html)

Class that represents a sound. This class is used by the students to extend the capabilities of SimpleSound. Copyright Georgia Institute of Technology 2004

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| **Field Summary** | |
| --- | --- |

| **Fields inherited from class** [**SimpleSound**](http://docs.google.com/SimpleSound.html) |
| --- |
| [MAX\_NEG](http://docs.google.com/SimpleSound.html#MAX_NEG), [MAX\_POS](http://docs.google.com/SimpleSound.html#MAX_POS) |

| **Constructor Summary** | |
| --- | --- |
| [**Sound**](http://docs.google.com/Sound.html#Sound(int))(int numSamples)            Constructor that takes the number of samples in the sound |
| [**Sound**](http://docs.google.com/Sound.html#Sound(int,%20int))(int numSamples, int sampleRate)            Constructor that takes the number of samples that this sound will have and the sample rate |
| [**Sound**](http://docs.google.com/Sound.html#Sound(Sound))([Sound](http://docs.google.com/Sound.html) copySound)            Constructor that takes a sound to copy |
| [**Sound**](http://docs.google.com/Sound.html#Sound(java.lang.String))([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) fileName)            Constructor that takes a file name |

| **Method Summary** | |
| --- | --- |
| static void | [**main**](http://docs.google.com/Sound.html#main(java.lang.String%5B%5D))([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true)[] args) |
| [String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) | [**toString**](http://docs.google.com/Sound.html#toString())()            Method to return the string representation of this sound |

| **Methods inherited from class** [**SimpleSound**](http://docs.google.com/SimpleSound.html) |
| --- |
| [asArray](http://docs.google.com/SimpleSound.html#asArray()), [blockingPlay](http://docs.google.com/SimpleSound.html#blockingPlay()), [blockingPlayAtRateDur](http://docs.google.com/SimpleSound.html#blockingPlayAtRateDur(double,%20double)), [blockingPlayAtRateInRange](http://docs.google.com/SimpleSound.html#blockingPlayAtRateInRange(float,%20int,%20int)), [blockingPlayOld](http://docs.google.com/SimpleSound.html#blockingPlayOld()), [convert](http://docs.google.com/SimpleSound.html#convert(java.lang.String,%20java.lang.String)), [explore](http://docs.google.com/SimpleSound.html#explore()), [getAudioFileFormat](http://docs.google.com/SimpleSound.html#getAudioFileFormat()), [getBuffer](http://docs.google.com/SimpleSound.html#getBuffer()), [getChannels](http://docs.google.com/SimpleSound.html#getChannels()), [getDEBUG](http://docs.google.com/SimpleSound.html#getDEBUG()), [getFileName](http://docs.google.com/SimpleSound.html#getFileName()), [getFrame](http://docs.google.com/SimpleSound.html#getFrame(int)), [getLeftSample](http://docs.google.com/SimpleSound.html#getLeftSample(int)), [getLength](http://docs.google.com/SimpleSound.html#getLength()), [getLengthInBytes](http://docs.google.com/SimpleSound.html#getLengthInBytes()), [getLengthInFrames](http://docs.google.com/SimpleSound.html#getLengthInFrames()), [getNumSamples](http://docs.google.com/SimpleSound.html#getNumSamples()), [getPlaybacks](http://docs.google.com/SimpleSound.html#getPlaybacks()), [getRightSample](http://docs.google.com/SimpleSound.html#getRightSample(int)), [getSample](http://docs.google.com/SimpleSound.html#getSample(int)), [getSamples](http://docs.google.com/SimpleSound.html#getSamples()), [getSampleValue](http://docs.google.com/SimpleSound.html#getSampleValue(int)), [getSampleValueAt](http://docs.google.com/SimpleSound.html#getSampleValueAt(int)), [getSamplingRate](http://docs.google.com/SimpleSound.html#getSamplingRate()), [getSoundExplorer](http://docs.google.com/SimpleSound.html#getSoundExplorer()), [isStereo](http://docs.google.com/SimpleSound.html#isStereo()), [loadFromFile](http://docs.google.com/SimpleSound.html#loadFromFile(java.lang.String)), [makeAIS](http://docs.google.com/SimpleSound.html#makeAIS()), [play](http://docs.google.com/SimpleSound.html#play()), [playAtRateDur](http://docs.google.com/SimpleSound.html#playAtRateDur(double,%20double)), [playAtRateInRange](http://docs.google.com/SimpleSound.html#playAtRateInRange(float,%20int,%20int)), [playAtRateInRange](http://docs.google.com/SimpleSound.html#playAtRateInRange(float,%20int,%20int,%20boolean)), [playNote](http://docs.google.com/SimpleSound.html#playNote(int,%20int,%20int)), [printError](http://docs.google.com/SimpleSound.html#printError(java.lang.String)), [printError](http://docs.google.com/SimpleSound.html#printError(java.lang.String,%20java.lang.Exception)), [removePlayback](http://docs.google.com/SimpleSound.html#removePlayback(Playback)), [setAudioFileFormat](http://docs.google.com/SimpleSound.html#setAudioFileFormat(javax.sound.sampled.AudioFileFormat)), [setBuffer](http://docs.google.com/SimpleSound.html#setBuffer(byte%5B%5D)), [setFrame](http://docs.google.com/SimpleSound.html#setFrame(int,%20byte%5B%5D)), [setLeftSample](http://docs.google.com/SimpleSound.html#setLeftSample(int,%20int)), [setRightSample](http://docs.google.com/SimpleSound.html#setRightSample(int,%20int)), [setSampleValue](http://docs.google.com/SimpleSound.html#setSampleValue(int,%20int)), [setSampleValueAt](http://docs.google.com/SimpleSound.html#setSampleValueAt(int,%20int)), [setSoundExplorer](http://docs.google.com/SimpleSound.html#setSoundExplorer(SoundExplorer)), [write](http://docs.google.com/SimpleSound.html#write(java.lang.String)), [writeToFile](http://docs.google.com/SimpleSound.html#writeToFile(java.lang.String)) |

| **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()), [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** |
| --- |

### Sound

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

Constructor that takes a file name

**Parameters:**fileName - the name of the file to read the sound from

### Sound

public **Sound**(int numSamples)

Constructor that takes the number of samples in the sound

**Parameters:**numSamples - the number of samples desired

### Sound

public **Sound**(int numSamples,  
 int sampleRate)

Constructor that takes the number of samples that this sound will have and the sample rate

**Parameters:**numSamples - the number of samples desiredsampleRate - the number of samples per second

### Sound

public **Sound**([Sound](http://docs.google.com/Sound.html) copySound)

Constructor that takes a sound to copy

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

### toString

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

Method to return the string representation of this sound

**Overrides:**[toString](http://docs.google.com/SimpleSound.html#toString()) in class [SimpleSound](http://docs.google.com/SimpleSound.html) **Returns:**a string with information about this sound

### 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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