Minim is a library included with Processing that makes it simple to include audio to your sketches.

Documentation:
http://code.compartmental.net/tools/minim/

Features include:
- Sample Playback
- Audio Input (recording)
- Synthesis
- Audio effects
- ...
How to Use it?

Minim is a library and you must first import it:

```java
import ddf.minim.*;
import ddf.minim.spi.*;
import ddf.minim.signals.*;
import ddf.minim.analysis.*;
import ddf.minim.ugens.*;
import ddf.minim.effects.*;
```

You don’t need to always import all of these. For basic use you only need:

```java
import ddf.minim.*;
```

Then you need to declare and instantiate a Minim object:

```java
Minim minim;

void setup(){
    minim = new Minim(this);
}
```
How to Use it? – Sample Playback

For sample playback, you have three options:

1. `loadSnippet(String filename)`
   - This is loaded into the RAM
   - Use for short audio clips
2. `loadSample(String filename)`
   - Also loaded to RAM, but you have access to the actual audio samples
   - Use for small samples that need to be triggered
   - drum sounds, sound effects etc.
3. `loadFile(String filename)`
   - Streamed from the hard drive or URL
   - For larger audio files
   - More latency than with the other options
   - It is recommended to use uncompressed audio (.wav, .aiff)
Example:

```java
import ddf.minim.*;
Minim minim;
AudioPlayer player;

void setup(){
    size(500,500);
    minim = new Minim(this);

    // loadFile loads the file from the data folder
    // you can also pass an absolute path, or a URL.
    player = minim.loadFile("drums.wav");
    player.play();
}

void draw(){
}

void stop()
{
    // always close Minim audio classes
    player.close();
    // always stop Minim before exiting
    minim.stop();
    // The super.stop() makes sure that all the normal cleanup routines are done
    super.stop();
}
```
How to Use it? – Controls

You can play, pause and loop:
http://code.compartmental.net/tools/minim/manual-playable/

You can control the panning and gain of the sample:
http://code.compartmental.net/tools/minim/manual-controller/

How to map the mouseX to the gain:

```java
void draw(){
  float vol = map(mouseX,0,width,-60,0);
  player.setGain(vol);
}
```
How to Use it?

http://code.compartmental.net/tools/minim/manual-minim/