

pack function

Show the use of the *unpack* function

Note: the unpack function produces a *tuple*

About the unpack function

<https://docs.python.org/3/library/struct.html>

In python:

```
>>> import struct
```

```
>>> s = struct.pack('h', 2)
```

```
>>> s
```

```
b'\x02\x00'
```

```
>>> x = struct.unpack('h', s)
```

```
>>> x
```

```
(2,)          # THIS IS A TUPLE WITH ONE ELEMENT
```

```
>>> type(x)
```

```
<class 'tuple'>
```

```
>>> s = struct.pack('hh', 2, 3)
```

```
>>> s
```

```
b'\x02\x00\x03\x00'
```

```
>>> x = struct.unpack('hh', s)
```

```
>>> x
```

```
(2, 3)       # THIS IS A TUPLE WITH TWO ELEMENTS
```

```
>>> type(x)
```

```
<class 'tuple'>
```

Play a wave (WAV) file using PyAudio

In the demo file 'play_wave_mono.py', what if the gain is very high? How does that affect the sound?

Activity for student

There are separate demo files for mono and stereo wave (WAV) files. Instead of two separate programs for mono and stereo files, write a single Python program that can handle both. Your program should first determine if the file is mono or stereo by reading the wave file information.