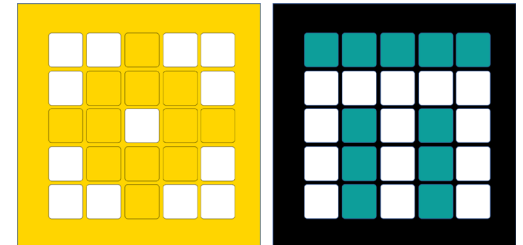


# PRIME LESSONS

By the Makers of EV3Lessons



## PLAYING SOUND

BY SANJAY AND ARVIND SESHAN

# LESSON OBJECTIVES

- Learn how to use the speaker functions to play sounds

# SPEAKER FUNCTIONS

- Used to played beeps out of the Hub.

- You can set the volume of beeps

```
hub.speaker.set_volume(volume)
```

0-100

- You can read the current volume setting

```
hub.speaker.get_volume()
```

- You can play a note of your choice for a particular duration

```
hub.speaker.beep(note=60, seconds=0.2)
```

<u>MIDI note number</u>	<u>Duration of beep</u>
<u>(default value: 60)</u>	<u>(default value: 0.2)</u>

- You also have the option to start playing a beep, which will allow the program to continue to the next line, and then stop the beep later in the code

```
hub.speaker.start_beep(note=60)
```

```
hub.speaker.stop()
```

# CHALLENGE AND SAMPLE SOLUTION

- Set the speaker volume to 75%
- Compose a short piece of music with 4 notes
- Play it 4 times

```
hub.speaker.set_volume(75) Set speaker volume to 75%  
for i in range(4): Music is played 4 times using a for loop  
    hub.speaker.beep(60, 0.25)  
    hub.speaker.beep(62, 0.25) Four notes are played  
    hub.speaker.beep(64, 0.25)  
    hub.speaker.beep(65, 0.25)
```

# CREDITS

- This lesson was created by Arvind and Sanjay Seshan for Prime Lessons
- More lessons are available at [www.primelessons.org](http://www.primelessons.org)



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