Making a Flute/Recorder out of your Scribbler Robot

Today we are going to use commands to GET information from your robot’s sensor (in particular: its three LIGHT sensors), and write a function to beep at a different tone/frequency depending on how many of the three sensors are covered up by your fingers – just like a recorder or flute.

Firstly, we need to learn how to GET the light sensor values. There are three light sensors – “left”, “center” and “right”. We can access them using the getLight command and as an input, giving it the position of the sensor whose value we want:

getLight(“left”)

*or*

getLight(“center”)

*or*

getLight(“right”)

**Try using these commands in the shell and write down the values when the sensor is uncovered and when the sensor is covered.**

**The next thing we need to learn how to do is beep at different frequencies. Find documentation on the beep command and try it out in the shell.**

We’re going to name our function **makeTone** and run it this way…

makeTone(getLight(“left”), getLight(“center”), getLight(“right))

…so you have to define a function called makeTone which has three inputs… you can name them whatever you want, but I recommend you name them something like leftLight, centerLight, and rightLight or something similar.

Your function is going to need to ask questions about the three values and then choose a beep that is appropriate. Remember:

1. We ask questions using the conditional statements if, elif and else (first version of our program is ONLY going to use if).
2. We can compare two things using <, >, ==, <=, or >=

Once you are done, you can run your function in a loop for 10 seconds like this:  
  
for seconds in timer(10):  
 makeTone(getLight(“left”), getLight(“center”), getLight(“right”)