

1 - Scrolling Text

Added libraries:



To scroll text across the LED Display, you'll need to add a library. Click on the + next to "Libraries" and select *Scrolling*. (Note that the "LED Display" and "Basic Sensors" libraries should load automatically.)

Drag scroll blocks into the scripting area. Click the text to customize it. You can also scroll numbers to create a countdown.

```
when button A → pressed
scroll text HELLO ROSA!
```

```
when button B pressed
scroll number 3
scroll number 2
scroll number 1
scroll text GO!
```

Challenge: Try adding a timer to make the count take almost exactly 3 seconds by adjusting the "pausing" option. The "say" block shows the timer result in the bubble. Is this count down faster or slower than before the change?

```
when button A+B pressed

reset timer

scroll number 3 pausing 66 ms 

scroll number 2 pausing 66 ms 

scroll number 1 pausing 67 ms 

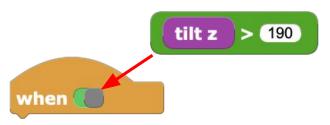
say timer

scroll text GO!
```

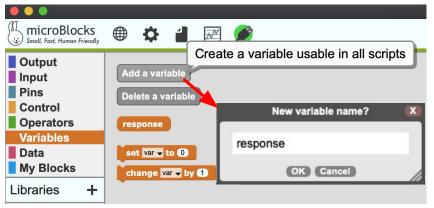


2 - Magic 8-Ball

A Magic 8-Ball* responds to a question when you shake it. Make one using a "when ()" hat block that monitors "tilt z" (Basic Sensors palette).



Click "Add a variable", then name it response. This variable will be assigned a random value each shake.



Create an answer for each possible Magic 8-Ball response. Each time you shake, the scrolled text will be a surprise. Go ahead, ask and shake!

```
when started
display character?

when tilt z > 190

wait 500 millisecs

set response → to random 1 to 4

if response = 1
```

```
response
              = 10
scroll text YES!
        response
                   = 2
else if
scroll text SURE
                   = 3
else if
        response
scroll text MAYBE
       response
else if
                   = 4
scroll text NOPE
wait 500 millisecs
display character ?
```

Challenge: Use the File menu to open the "Rock-paper-scissors - shake" example in the Games folder. You can play against your friends, or play the micro:bit in one hand against your other hand!

^{*} Find original Magic 8-Ball answers here: http://microblocks.fun