

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 4

scroll number 2 pausing 66 ms 4

scroll number 1 pausing 67 ms 4

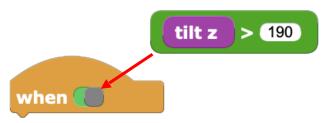
say timer

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.



If shaking is detected, create an answer for every response in the range of possible random numbers. Each time it runs, 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
               = 1
     response
  scroll text YES!
 else if
         response
                    = 2
  scroll text SURE
                    = 3
 else if
        response
  scroll text MAYBE
        response
                    = 4
 else if
  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

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