

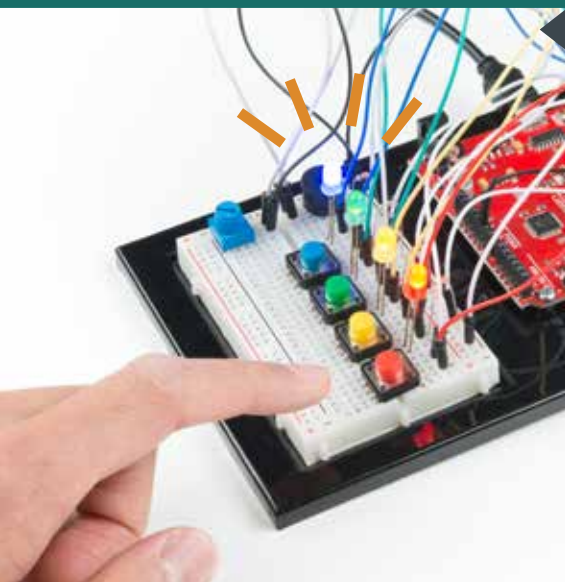
Open the Arduino IDE

Connect the RedBoard to a USB port on your computer.

Open the Sketch:

File > Examples > SIK-Guide-Code-master > **SIK_CIRCUIT_2C-SIMON SAYS**

Select **UPLOAD** to program the sketch on the RedBoard.



WHAT YOU SHOULD SEE

The circuit will flash all of the LEDs and play a melody. After a few seconds, it will flash the first light in the pattern. If you repeat the pattern correctly by pressing the corresponding colored button, then the game will move to the next round and add another color to the pattern sequence. If you make a mistake, the “Game Over” melody will play. If you get to round 10, the “You Win” melody will play. Press any button to start a new game.

PROGRAM OVERVIEW

1

Check if a new game is starting. If it is, play the start sequence. Reset the counter that keeps track of rounds, and randomly generate a sequence of numbers from 0 to 3 that controls which LEDs the user will have to remember.

2

The game works in rounds that progress from 0 to 10. Each round the game will flash LEDs in a pattern, and then the player has to recreate the pattern by pressing the button(s) that match the LED(s). In the first round, one LED will flash, and the player will have to press one button. In the eighth round, eight LEDs will flash, and the player will have to press eight buttons.

3

A loop is used to flash LEDs from the sequence until you have flashed the number of LEDs that matches the round number (1 for round 1, 2 for round 2, etc.).