Coding with the TI-Innovator Hub

Instructor Bio

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Jennie is the department chair at Pearland High School in Pearland, TX where she teaches PAP Algebra 2 and AP Computer Science Principles.

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Objectives

- Write programs that control the LED and SOUND devices on the TI-Innovator™ Hub.

- Use the Send and Wait commands to control the LED and SOUND devices on the TI-Innovator™ Hub.

- Simulate a traffic light on the TI-Innovator™ Hub.

- Play a song on the TI-Innovator™ Hub.

Color LED

Available parameters for the COLOR command:

TI-84:
Send("SET COLOR # # # [BLINK *frequency*] [TIME *duration*]")

TI-Nspire:
Send "SET COLOR # # # [BLINK *frequency*] [TIME *duration*]"

Color	#	#	#
Red	255	0	0
Green	0	255	0
Blue	0	0	255
Yellow			

Sound

Available parameters for the SOUND command:

TI-84:
Send("SET SOUND *frequency* [TIME *duration*]")

TI-Nspire:
Send "SET SOUND *frequency* [TIME *duration*]"

TIME is optional. If TIME is left out, it defaults to 1 second.
Even the word TIME is optional.
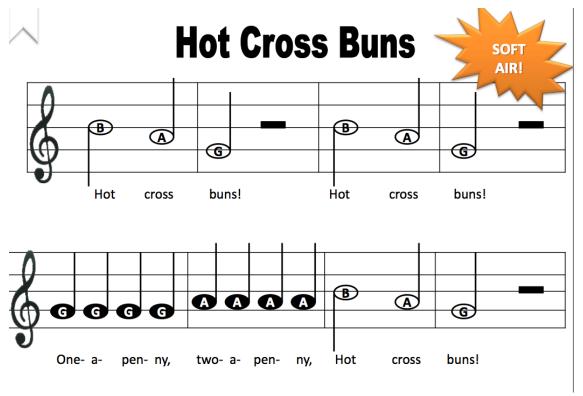
Traffic Light Simulation

10 Minutes of Code
>Unit 1 Application

Write a program to simulate a traffic light.

Challenge: Add SOUNDs so that a blind person (pedestrian, not driver!) can tell which color the light is.

Play Music

Hot Cross Buns

SOFT AIR!

Send "SET SOUND B4 2"
Wait 2
Send "SET SOUND A4 2"
Wait 2
Send "SET SOUND G4 2"
Wait 4

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