

TOUCH SENSOR: FIX MY CODE

Skills Challenge

By EV3Lessons

Program Goal:

The goal of the code is to keep a count of how many times you have hit the touch sensor and display the number to the screen.



Instructions to team/class:

Each student should identify if the code does what it is supposed to do and how to fix it.

Students can recreate and test the code on their robot first or complete the challenge by just looking at the code above.

Discussion:

What was wrong with the code? What happens when you press the touch sensor?

When you "press" the touch sensor once, time passes before you release the sensor. Since the code runs through the loop very quickly, the program will pass through the loop many times

before you release the button. This happens even though the sensor was only "bumped" once.

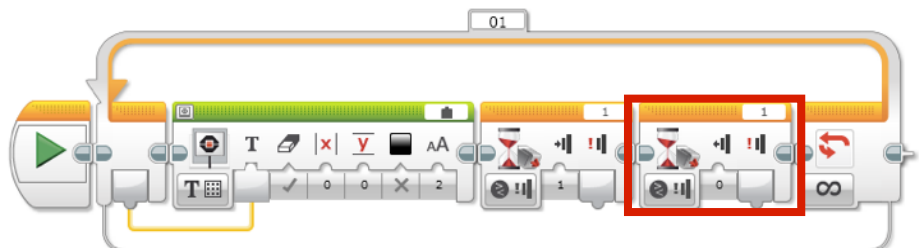
There are two alternate solutions shown below. Discuss the differences between them. The goal of this discussion is to realize that there can be multiple solutions to any programming challenge. Some may be better than others, but there are multiple possible solutions.

Next Steps:

If students had trouble with this challenge, they should refer to the touch sensor lesson to learn about the different modes (Released vs. Pressed vs. Bumped). They can review the Display block lesson as well if needed.

Alternative Solutions:

The top solution adds a second Wait Block that waits until the touch sensor is "released" so it will not go through the loop until you have stopped touching the sensor



The bottom solution changes the wait for from "pressed" to "bumped" mode.

