

## Switches

By Sanjay and Arvind Seshan



# BEGINNER PROGRAMMING LESSON

# LESSON OBJECTIVES

1. Learn how to make your robot decide what to do out of different choices
2. Learn how to use a Switch Block

# SWITCH BLOCKS



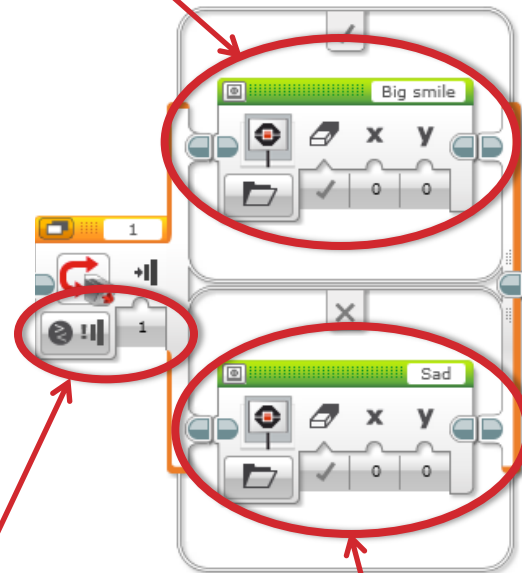
Asking the robot a question and doing something different based on the answer

- Example: Does the robot see a line? Or not?

Basically a YES/NO QUESTION

Switch blocks are found in the orange/flow tab

Run this code if the answer is yes



The question being asked: is the touch sensor pressed

Run this code if the answer is no

# SWITCH BLOCK CHALLENGE 1



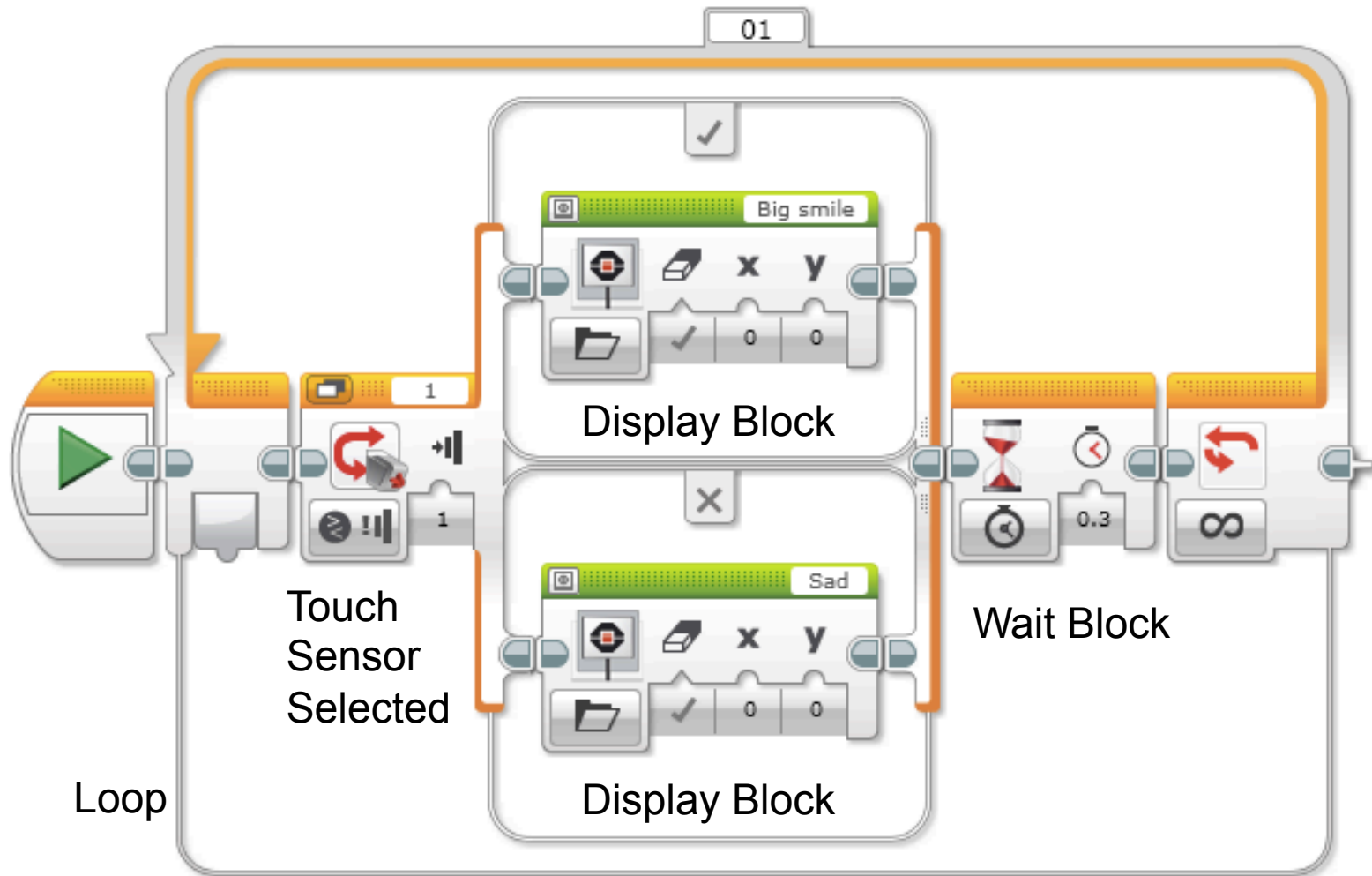
**Challenge:** Write a program that changes the display based on if the touch sensor is pressed or not pressed.

If pressed, your EV3 is happy! Display a smiley face. If not pressed, the EV3 is sad! Display a sad face.

**Hint:** You will need to use the display block, loops and switch blocks!



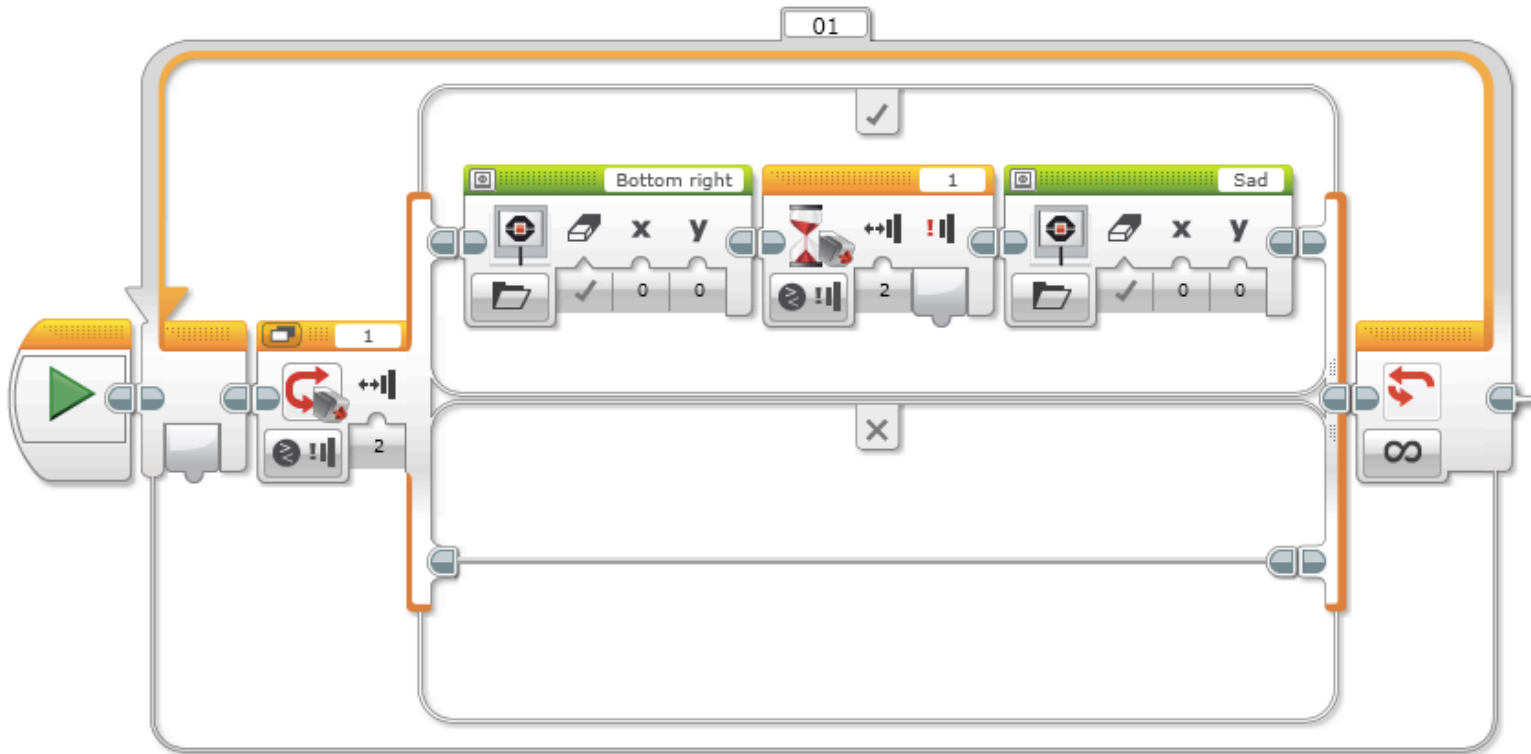
# CHALLENGE 1 SOLUTION



# SWITCH BLOCK CHALLENGE 2

**Can you write a program that display big eyeballs if you touch it once and a sad face if you touch it a second time and toggles back and forth.**

# CHALLENGE 2 SOLUTION



# CREDITS

- This tutorial was created by Sanjay Seshan and Arvind Seshan
- More lessons are available at [www.ev3lessons.com](http://www.ev3lessons.com)



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).