

EV3 LESSONS



Switches (If Then and If Then Else Blocks)

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 (IF THEN) 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

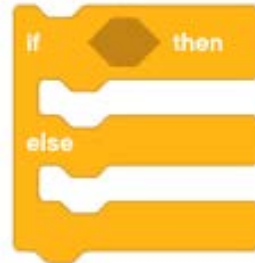
Switch blocks are found in the orange/flow tab

If Then Block



Run this code if the answer is yes

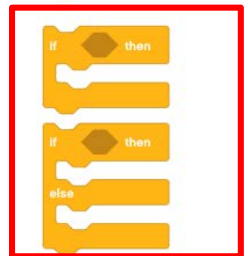
If Then Else Block



Run this code if the answer is yes

Run this code if the answer is no

Control



SWITCH BLOCK CHALLENGE 1

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

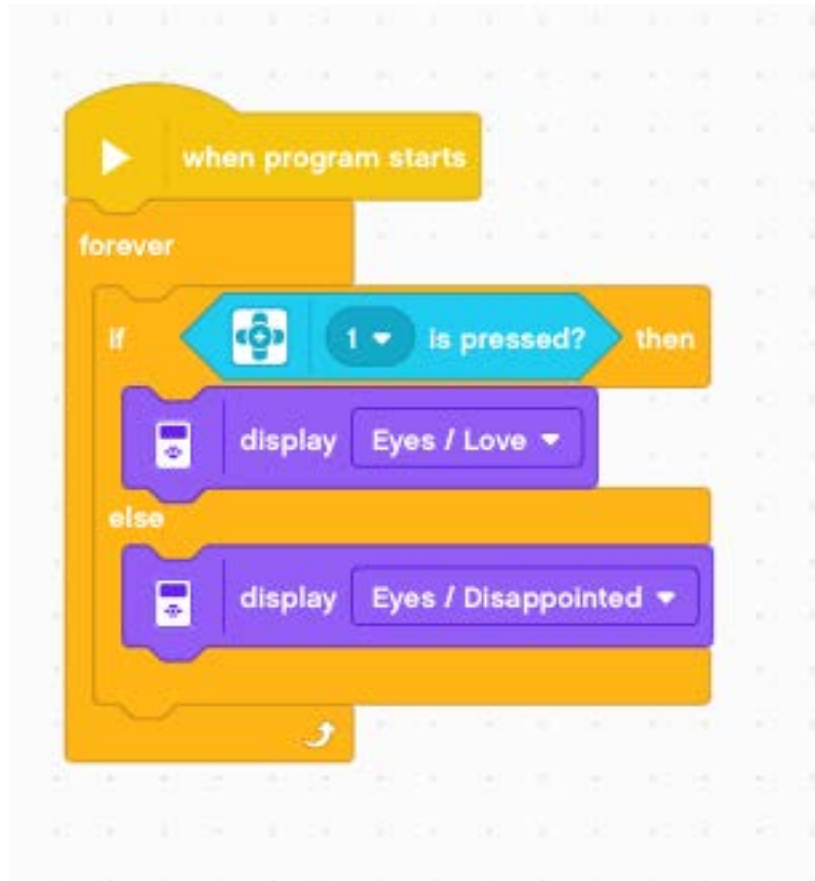
If pressed, your EV3 is happy! Display a smiley face. If not pressed, the EV3 is sad! Display a sad face.

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



CHALLENGE 1 SOLUTION

Loop



If Touch Sensor pressed

Display Happy Face/Eyes

Display a Sad Face/Eyes

CREDITS

- This tutorial was created by Sanjay Seshan and Arvind Seshan
- More lessons are available at 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/).