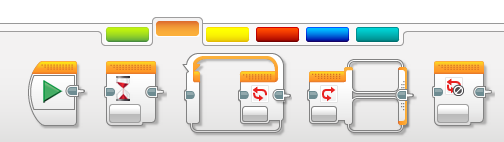
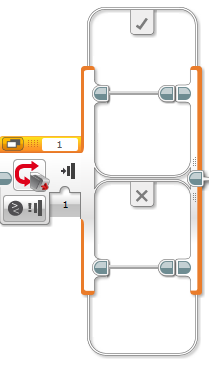
Module 5

Switch

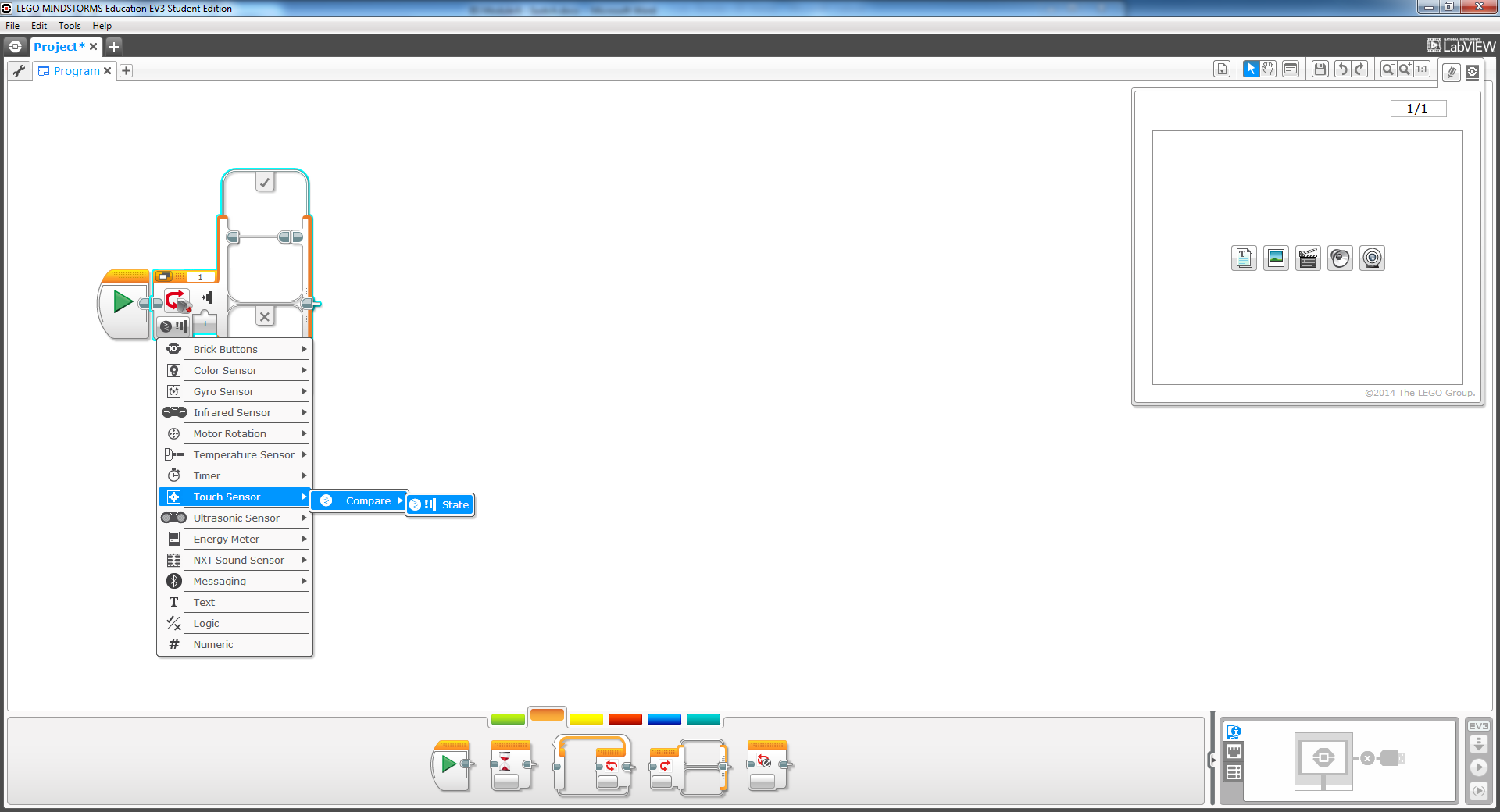
The Switch tests a certain condition, if the condition is true it performs the  box and if the condition is false it performs the  box.



By default it is set to Touch Sensor Mode.



The Mode can be change as shown below.

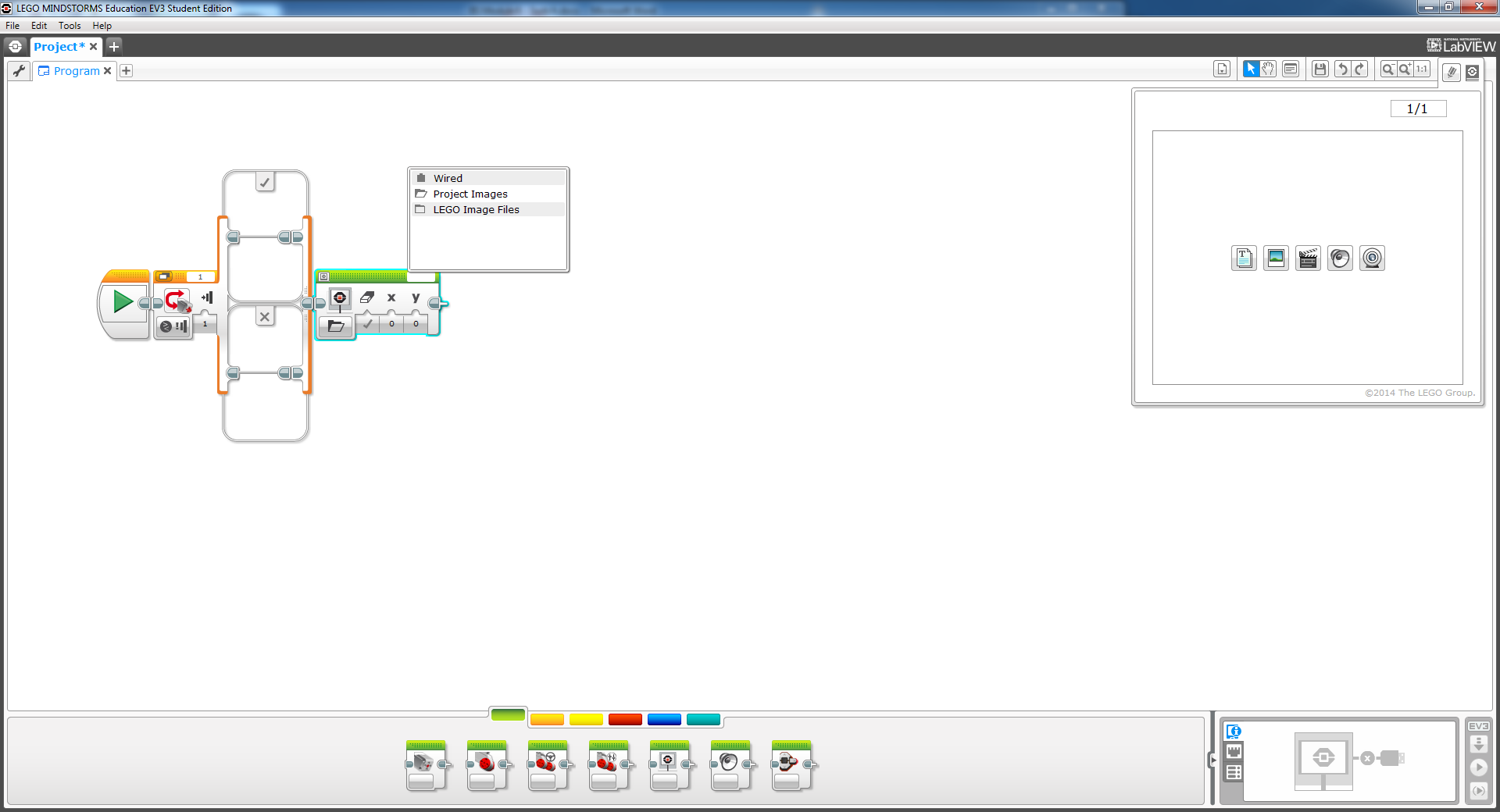


# Activity 1 – Switching Display

## Display

This block allows you to put images and texts on the screen.

Select the white square in the top right corner and pick images from the “LEGO Image Files”.



## The Switch

Create a program to change the display on the brick according to the state of a touch sensor.

1. Place a switch in your program with a Display block in each. Select a different image in each Display block.
2. Keep the mode of the switch on Touch Sensor.
3. Choose either state 0 or 1 on the Switch.
4. Put your switch in an Unlimited loop and play your program.

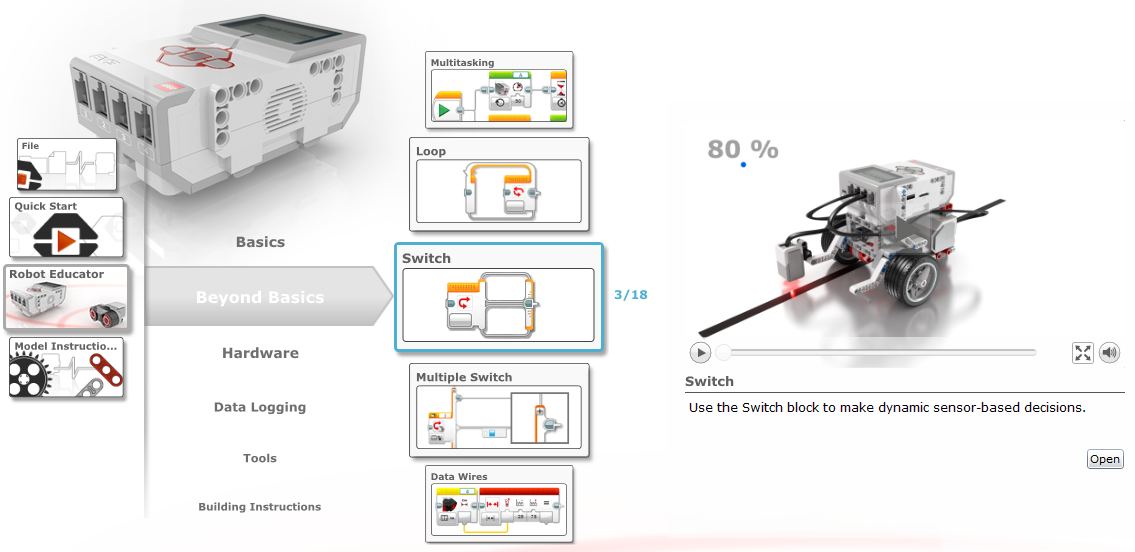
Your images will swap when you press the touch sensor. Try the other states to test them out.

*Hint: when using state 2 put a wait 2 sec block after the display block in the  box.*

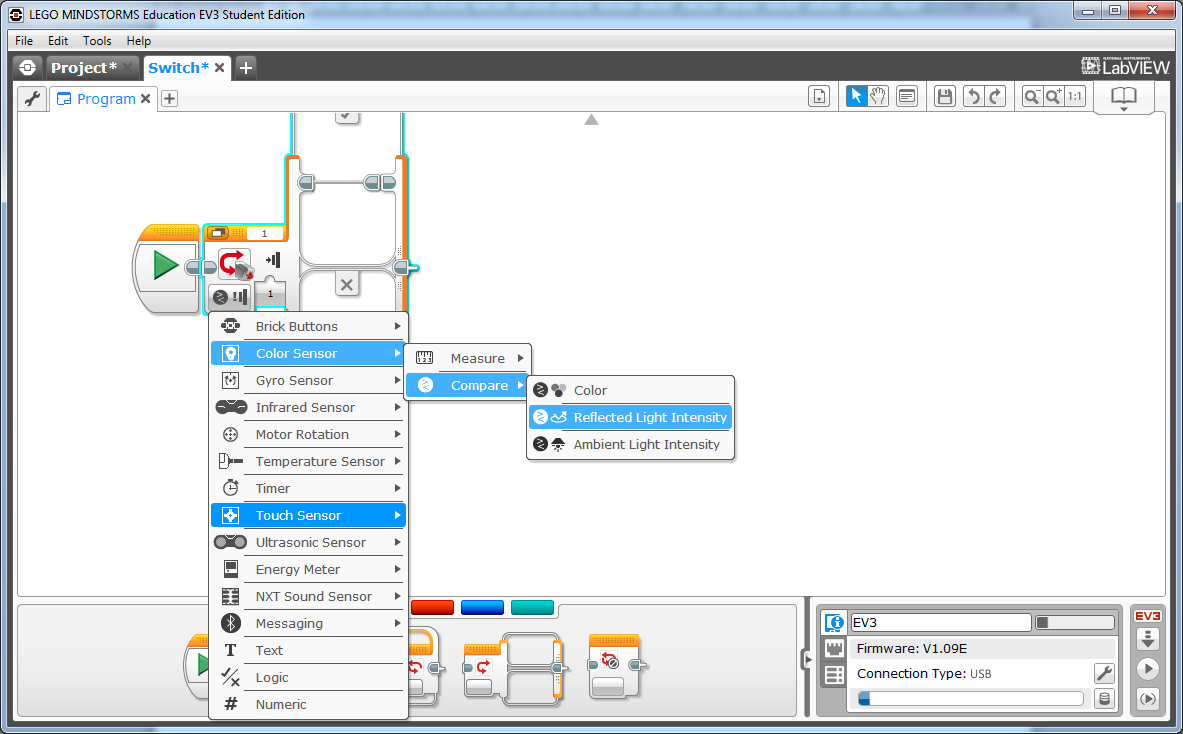
# Activity 2

## Tutorial

Open up and complete the tutorial project Robot Educator 🡪 Beyond Basics 🡪 Switch.



The switch is being used in “Reflected Light Intensity” mode.



## Challenge

Now that you have had some practice, try this problem.

1. Simplify

Can you simplify the program to only use 1 move block in each switch condition?

*Hint: You might be able to use the Move Steering or Move Tank blocks.*

1. Speed

What combination of number makes your robot follow the curved line the fastest?

*Hint: The two Move Tank blocks should have the same numbers but opposite and the Move Steering blocks should have the same power but opposite direction.*

This is your curved line for Activity 2 part 2. A You will want to tape this to a table so it doesn’t move.