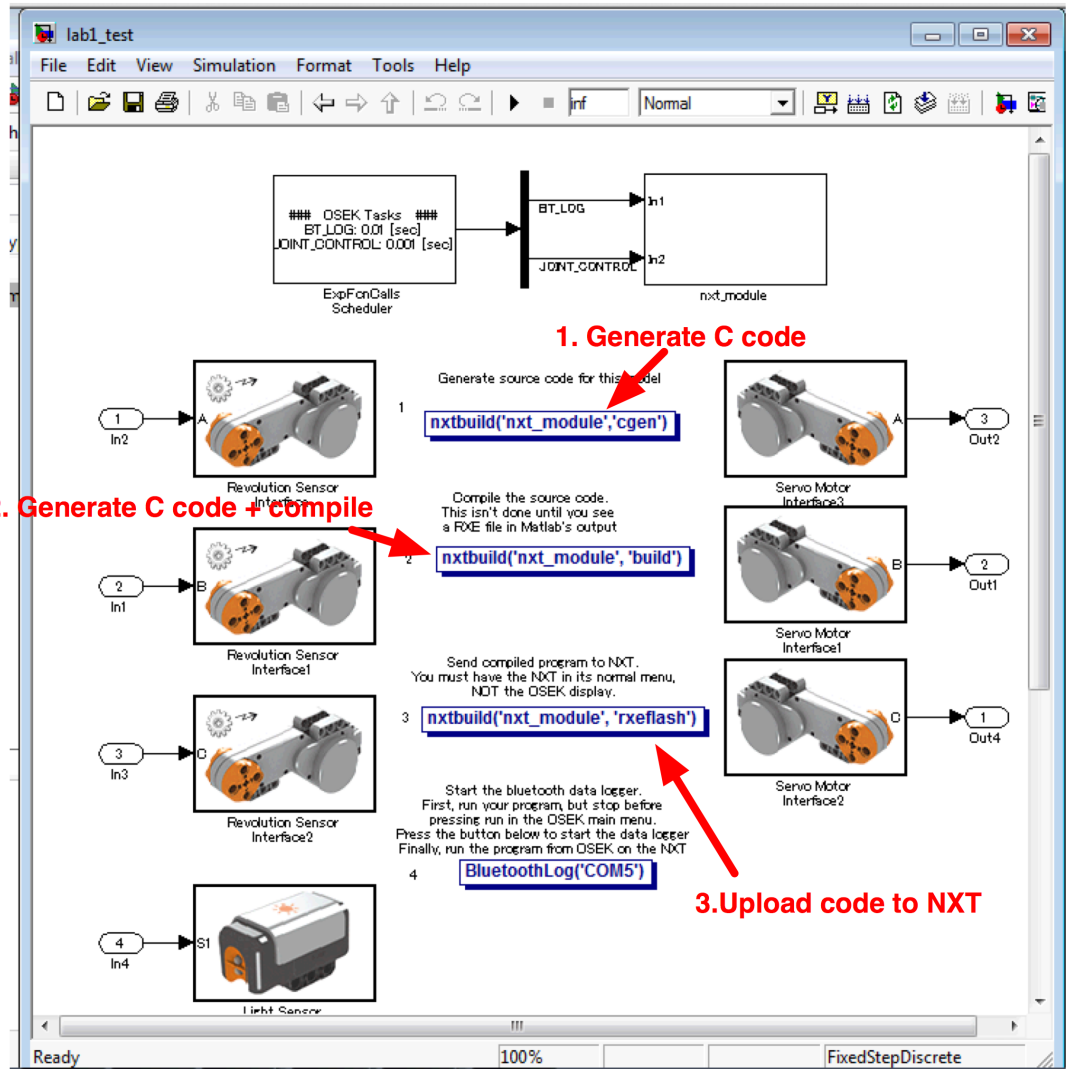
How to run your Simulink model on the NXT block

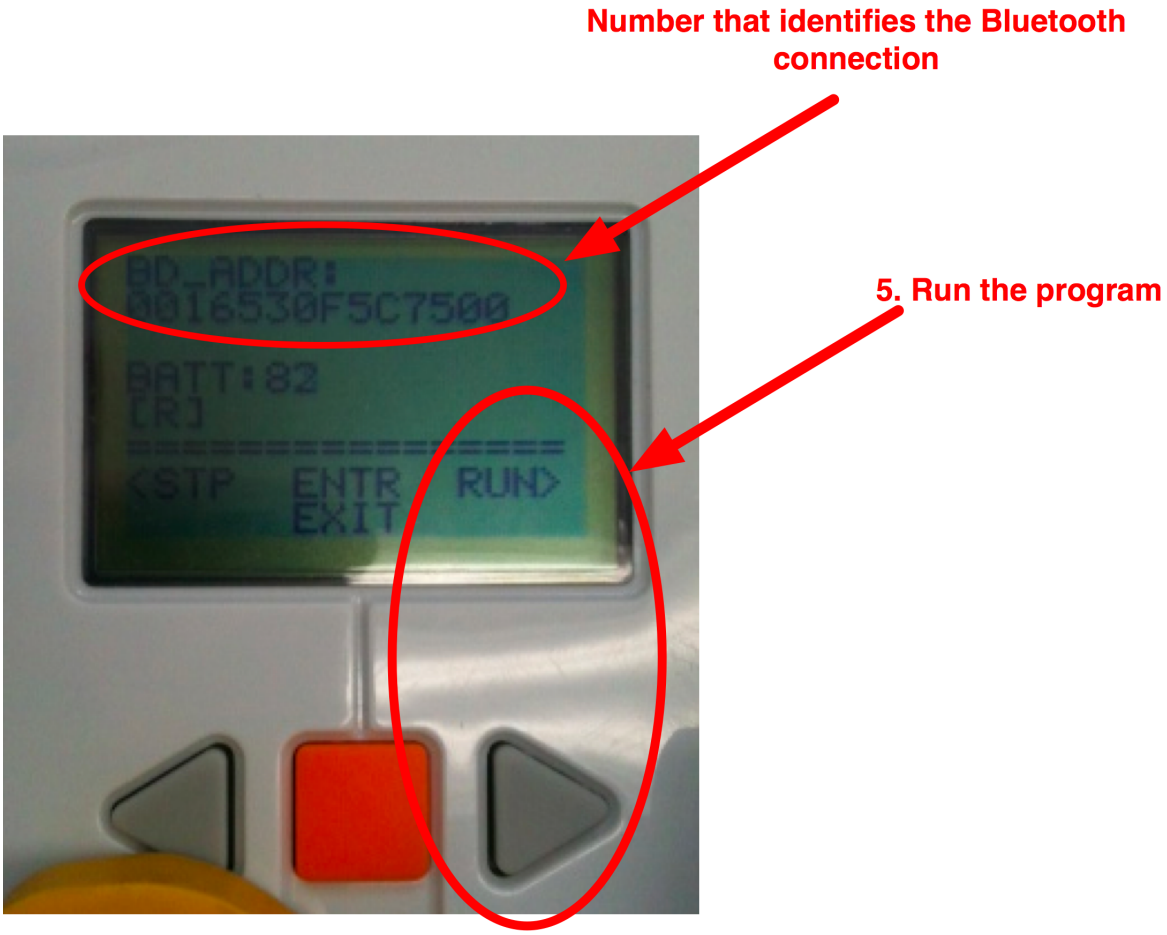
1. (optional): Build C code

2. build C code and compile it.
   You should see a pop-up window as a confirmation that your C code has been generated. BE PATIENT! You still need to wait for the code to be compiled.

3. Upload the program to the NXT block via USB (make sure the block in ON and connected to the USB cable).
   On the main Matlab window you should see a confirmation message, with a numer indicating the size of the transmitted data.



4. You can now run your application on the Lego NXT block! Go to files and open the uploaded one. One the main window, you should see a number that identifies the Bluetooth connection. DO NOT PRESS RUN yet!



5. Before starting your program, you want to set up the Bluetooth connection to save data. In the current Matlab directory there should be a file called BluetoothLog: it is a Matlab function that saves all the data from your robot (angle positions, etc) to a mat file. Run BluetoothLog by imputing on the screen BluetoothLog('COM##'), where ## is the Outport number of your bluetooth connection.

6. Once you read on the Command Window “Ready for DAQ via Bluetooth. Run your NXT!” it's time to press RUN (right triangle button on the NXT block) to start the uploaded application.

7. The data will be saved in a Matlab file called log.mat.