

## Programming Challenge

# Robocci

### Challenge Description

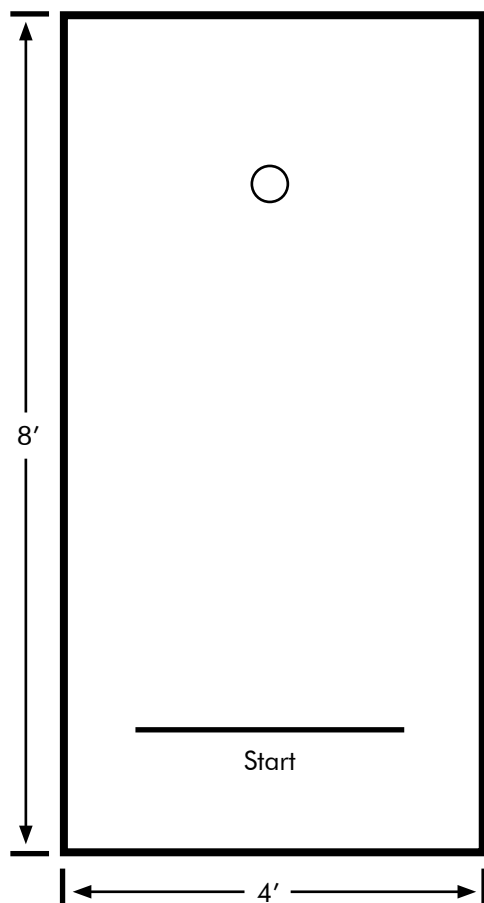
Using a limit switch or ultrasonic sensor, program your robot to move forward until it makes contact with a soda can (without moving it or knocking it over). It should then store the amount of time it took to make contact into an integer variable named "travelTime".

Keep your robot connected to the computer over VEXnet or USB to observe the value stored in "travelTime" using the "Robot > Debug Windows > Global Variables" window. (See page 2 for details on using the "Global Variables" window.)

### Materials Needed

- Black electrical tape
- 1 Soda can

### Board Specifications

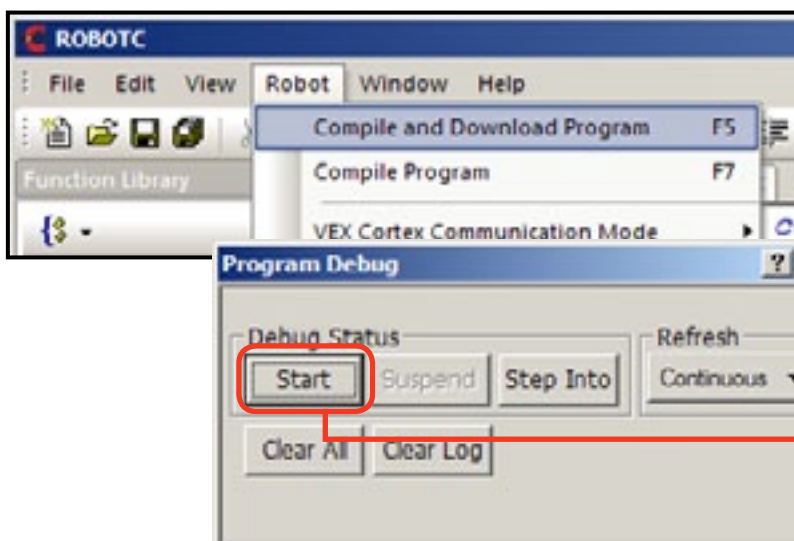


*Note: Diagrams are not drawn to scale*

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# Debugger Window: Global Variables

The Global Variables window is a powerful part of the ROBOTC debugger. When shown, it displays the current status of any variables declared in the program. Use the following steps to open the Global Variables window and view the information it provides.

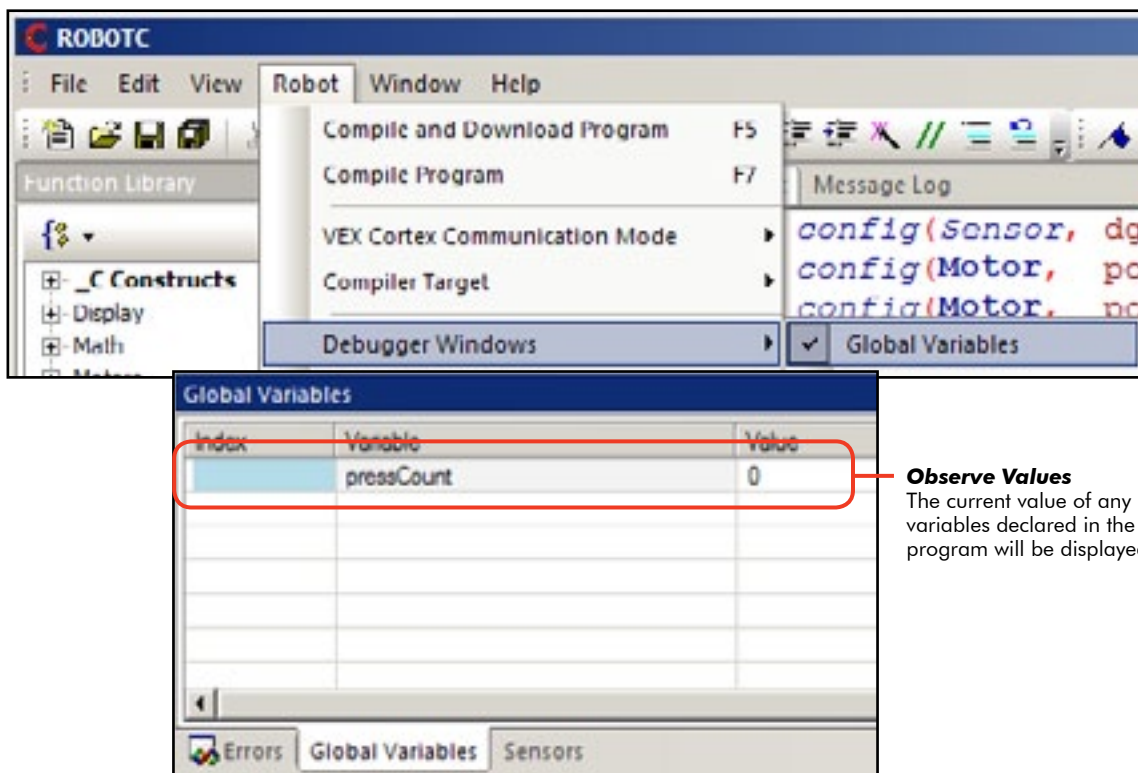


**Robot > Compile and Download Program**  
Compile and Download your program to the robot.

**Program Debug**  
The Program Debug window will open once the download is complete.

**Start Button**  
Press the "Start" button to initialize the program.

**Robot > Debugger Windows > Global Variables**  
Open up the Global Variables window.



**Observe Values**  
The current value of any variables declared in the program will be displayed.