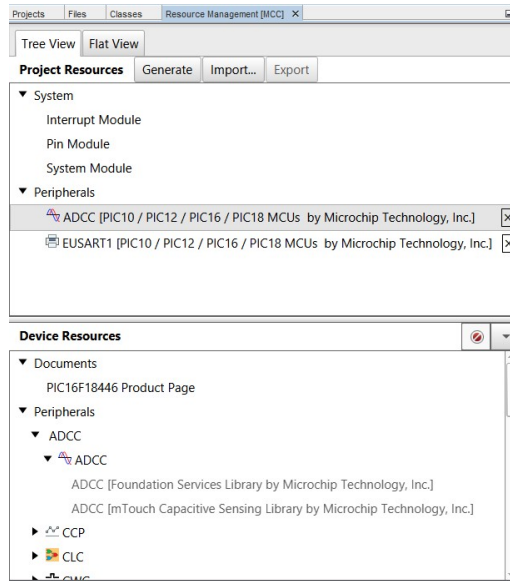


Lab 3: Noise Click Integration

This portion of the lab will build off of lab 1. Therefore, you will need to navigate back to the project pane on the left-hand side and set the first lab that we walked through as the main project.

1. Read Values From Noise Click:

- a. Add an ADCC peripheral to the project. We will use this to read the analog value that will be output from the Noise Click. It can be found under Device Resources>Peripherals->ADCC> **ADCC[PIC10/PIC12/PIC16/ PIC18]**



- b. Configure the ADCC pin. Connect the ADCC input to pin RC0

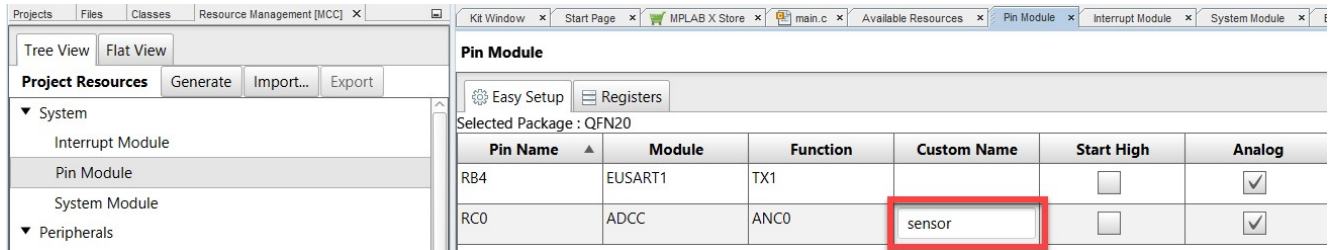
Package: QFN20		Pin No:	16	15	14	1	20	19	10	9	8	7	13	12	11	4	3	2	5	6
			Port A ▼				Port B ▼				Port C ▼									
Module	Function	Direction	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7		
ADCC ▼	ADCACT	input	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
	ADCGRDA	output	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
	ADCGRDB	output	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
	ANx	input	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
	VREF+	input		🔒																
	VREF-	input			🔒															
EUSART1 ▼	RX1	input	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
	TX1	output	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
OSC	CLKOUT	output					🔒													
Pin Module ▼	GPIO	input	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
	GPIO	output	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒	🔒		
RESET	MCLR	input				🔒														

Note: In this step make sure that the TX pin is still tied to pin RB4

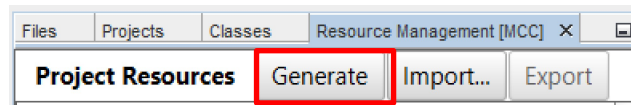
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2. Rename Pin:

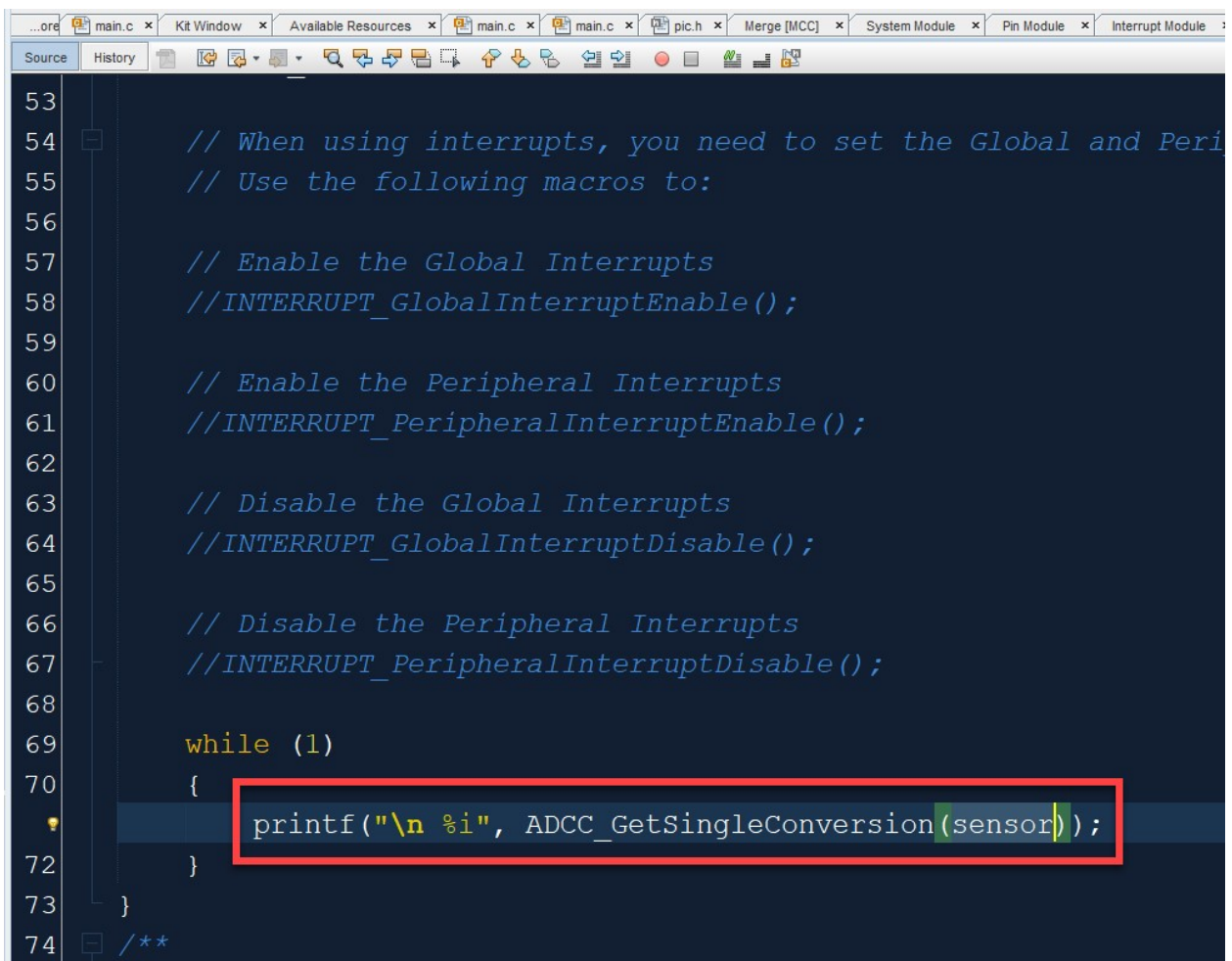
- In the Pin Module, name PIN RC0 something that is easier to remember



3. Generate Code: Click on generate code from top of the MCC window

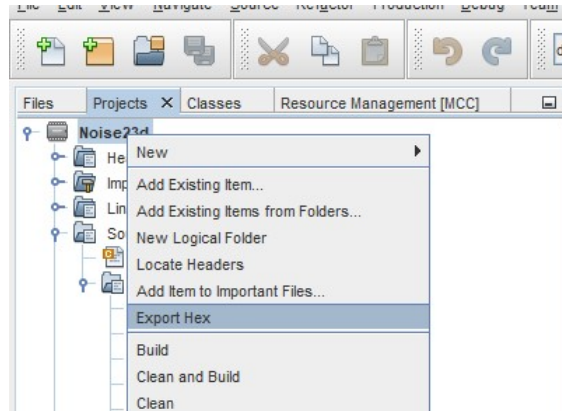


4. Edit main.c: Now go back to main.c. Make the following changes:



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5. **Compile and Program:** Go to the top level of your project and right click. In the dropdown menu you will see **Export Hex**. It will then ask you to provide a file name. Do this and click save.



6. **Connect and See Output:** Navigate back to CoolTerm and click connect if the settings have not changed. If you don't see anything in the terminal window, give your click a few taps and hopefully you will see things being output.