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PREPARATION

You will need a LaunchPad and access to TM4C123_LaunchPadUsersManual.pdf (/c4x/UTAustinX/UT.6.01x/asset/TM4C123_LaunchPadUsersManual.pdf).

STARTER PROJECT

Lab5_FunctionsInC

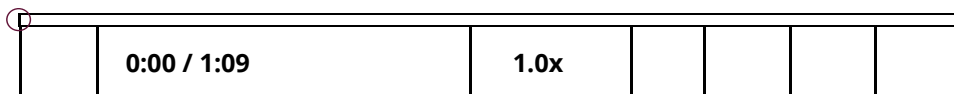
PURPOSE

In Lab5 you will learn how to write software that involves functions, parameters, and if-then conditionals.

SYSTEM REQUIREMENTS

The Lab5 starter project is the similar to **C5_Keil_Starter** and **C5_Keil_Solution** projects developed in the video. All three projects take input from the keyboard using **scanf** and performs output to the display using **printf**. It also includes connections to the Lab5 grader. The goal is for you to write a function that accepts two input parameters (length and width) and calculates the area of rectangular room with this length and width. The length and width are in meters and the returned area should be in square meters. Calculate the area only if both the length and width are between 3 and 20 inclusively. Return a result of zero if the length is less than 3, the width is less than 3, the length is greater than 20 or the width is greater than 20. You are asked to write the function **Calc_Area**.

LAB 5



Help



We begin by making sure the Options are set up for the simulator.

So we see that the simulator is selected as the target.

Next, we will build or compile, and then we hit the debug button here.

And so we will be debugging in the simulator.

Lab 5 uses the UART, so I need to open a UART window.

UART1 is where the data will be.

So I'll make it bigger by moving it up here and sliding it out.

And now when I run the program, I can interact with the system.

I type the input here.

So one length is 4, the width is 5, and you see the answer is 20.

If I put in a number bigger than 20, the

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