

EMBSYS100 - AU19

ASSIGNMENT 01

Goal

The goal for the assignment this week is to primarily **setup your development environment** as you would on the job:

1. Getting your **repository setup** to begin working on source code and documentation
2. Setting up your **IDE**
3. Setting up your **device** and validating everything works and able to connect and debug from IDE.

Problems:

1. Embedded device example

Using the telegraph example, and the challenges listed in the module as reference, and describe another device that you would like to discuss. Describe how you think its embedded system works, and what design challenges it presents.

2. Two's complement

Why use two's complement to represent negative numbers?

3. IAR installation and "Hello World"

Follow instructions in the "[EMBSYS100 Toolchain Instructions.pdf](#)" document to install IAR and run "Hello World" program.

What to turn in and how:

- Check in all your homework in your repo under the folder "**assignment01**".
- Your folder should contain the following:
 - o **3 separate MD** files:
 - First one containing your answer to the "Embedded device example"
 - Second one containing your answer to the usage of "2's complement"
 - Third one containing a screen shot showing the output from your "Hello World" (see the [Mastering Markdown](#) tutorial on how to embed an image into your MD file)
 - o Folder with your **source code** for "Hello World".
- Submit a link to your GitHub repo assignment:
 - o Ex: "https://github.com/<account_id>/embsys100/assignment01"