# Lab 10: Requirement Description

### • Introduction:

Video: <u>LAB10 - UART</u> Slide: <u>LAB10 - UART</u>

Hackmd: Lab10: Test Program Setup Tutorial

## Testing(0%):

## Description :

Follow the instruction in HackMD to test our UART cable can perfectly function. Please check all the factor (baud rate match especially) that will cause you receive wrong/none message on Putty before you reach out to TAs for cable replacement.

### ● Basic (70%):

#### Description :

Implement your own tester which allows you print what you've key on keyboard. However, in this case, your baud rate should be 1200. You can use Sample Code then complete UART\_Initialize() and MyusartRead() functions in setting\_hardware/uart.c to achieve that.

#### Advanced (30%) :

#### Description :

Please implement a simple device that ranges from 0 to 15 with 4 LEDs and a button. When the button is pressed once, the device should increment the count by one and continuously display the current number on Putty. The device initializes at 0.