Lab10: Test Program ... Try HackMD (https://hackmd.io?utm_source=view-page&utm_medium=logo-nav)

Lab10:Test Program Setup Tutorial

(i) Please download test uart.zip

(https://drive.google.com/file/d/1u6SISby0XR3CI4rUC9zPXD2I455ygCJ9/view?usp=sharing) first

!!test uart.zip Download Link (https://drive.google.com/drive/folders/1-IAQI-

AiAn dCg1pO99wXVhiNSn2DoBw)!!

Project Setting

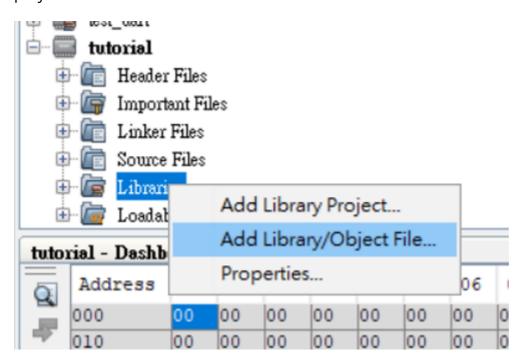
Create a new standalone project with the following settings

• **Device**: PIC18F4520

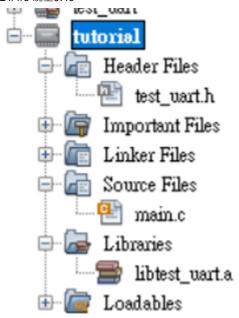
• Hardware Tool: PICkit 3 / PICkit 4

• Compiler: XC8 • Encoding: UTF-8

Extract test_uart.zip then add test_uart.h, libtest_uart.a and main.c into your project.



The project layout should like the picture shown below:



Wiring

- Connect PIC18F's RC6(TX) to the white wire of the UART.
- Connect PIC18F's RC7(RX) to the green wire of the UART.

Run and Test

First, right click on the windows icon on the left-bottom of your screen, select and open <code>Device Manager</code> to check which port your UART is using (it might be <code>com1</code>, <code>com2</code> or <code>com3</code>). It is <code>com3</code> in the below example.

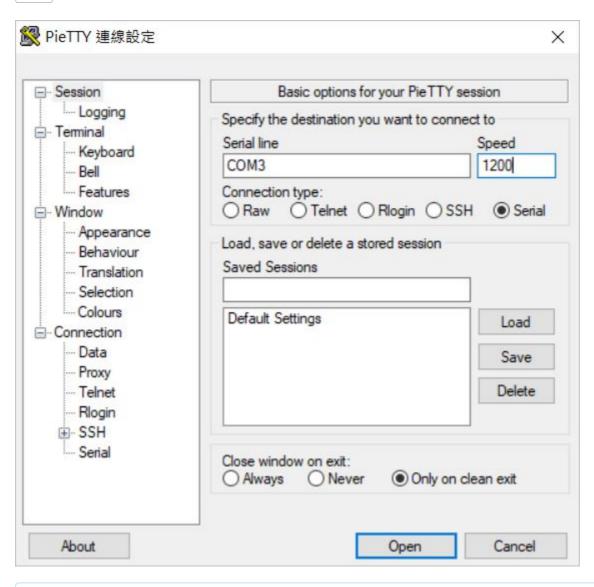


If Prolific driver can not be recognized as above, please use the <u>given driver</u> (https://drive.google.com/file/d/1arQNCsTusPRYLMo31AqB9DzZkiQ43D8V/view?usp=sharing) with the following steps:

- install driver.exe
- right click on the unrecognized port in Device Manager
- update device driver on your computer
- choose the old version (3.3.2.105).

Then you should see a recognized COM* just like the above example.

Open Putty and specify your **Serial line** to COM3 and set **Speed** to 1200 then press Open.





If your hardware is connected and set up properly, you can enter some text and see the direct output on the screen.

