# 签收页

你将基于以下的练习来针对WICED Wi-Fi 做多方面的实验。 练习分为基础和高级两个类型。在进入下一个章节之前，你需要保证至少完成基础练习。在时间允许的情况下可做高级练习。

每完成一个练习后，请演示给一位指导者，以此获得他们在这一页纸上的签名验收。

| **Initials** | **Chapter** | **Exercise** | **Category** | **Description** |
| --- | --- | --- | --- | --- |
|  | N/A | N/A | Basic | Verify “CheckMySetup” installation |
|  | 01 (Survey) | 01 | Basic | Create a Forum Account |
|  | 01 | 02 | Basic | Open the WICED Documentation |
|  | 02 (Peripherals) | 01 | Basic | Install BCM94343W\_AVN platform files |
|  | 02 | 02 | Basic | Setup a new project from a template |
|  | 02 | 03 | Basic | Blink an LED |
|  | 02 | 04 | Advanced | Toggle a pin that isn’t pre-initialized |
|  | 02 | 05 | Basic | Read an input pin |
|  | 02 | 06 | Basic | Use a pin interrupt |
|  | 02 | 07 | Advanced | Adjust LED brightness |
|  | 02 | 08 | Basic | Read ambient light sensor using the ADC  Use debug printing functions |
|  | 02 | 09 | Advanced | Write data using the standard UART functions |
|  | 02 | 10 | Advanced | Read data using the standard UART functions |
|  | 02 | 11 | Advanced | Use an I2C master to write data to the shield |
|  | 02 | 12 | Advanced | Use an I2C master to read sensor data from the shield |
|  | 02 | 13 | Advanced | Probe the I2C bus for any attached devices |
|  | 02 | 14 | Advanced | Make/modify platform files for the shield |
|  | 03 (RTOS) | 01 | Basic | Create an LED blink thread |
|  | 03 | 02 | Basic | Use a semaphore |
|  | 03 | 03 | Advanced | Use a MUTEX |
|  | 03 | 04 | Advanced | Use a Queue |
|  | 03 | 05 | Advanced | Use a Timer |
|  | 05 (Wi-Fi) | 01 | Basic | Attach to an open network |
|  | 05 | 02 | Basic | Attach to a WPA2 PSK network |
|  | 05 | 03 | Basic | Print network information to a terminal |
|  | 05 | 04 | Advanced | Switch between 2 networks within the application |
|  | 06 (Sockets / TLS) | 01 | Basic | Implement a client to write data to the server using TCP streams |
|  | 06 | 02 | Basic | Modify the client to inspect return code from the server |
|  | 06 | 03 | Advanced | Modify the client to use TCP packets |
|  | 06 | 04 | Advanced | Implement the server for a single TCP connection |
|  | 06 | 05 | Advanced | Implement the server to use TCP call back functions |
|  | 06 | 06 | Advanced | Implement the server to support multiple connections |
|  | 06 | 07 | Advanced | Modify the server and client to use TLS |
|  | 07b (Cloud / MQTT) | 01 | Basic | Provision a new *thing* in the AWS IOT cloud and test |
|  | 07b | 02 | Basic | Build and test the publisher demo |
|  | 07b | 03 | Basic | Explain the publisher demo firmware flow |
|  | 07b | 04 | Basic | Build and test the subscriber demo |
|  | 07b | 05 | Advanced | Implement the publisher and subscriber in 2 different kits and test |
|  | 07b | 06 | Advanced | Build and test the shadow demo |