

Exercise Checklist

You will be experimenting with various aspects of AnyCloud® by completing the exercises below. Labs are marked as "Basic" and "Advanced". You should make sure you complete the basic exercises first and then work on the advanced exercises as time allows.

01 (Tour)	✓	Chapter	Exercise	Category	Description
02 (Peripherals) 01 Basic Install Shield Support Libraries 02 Basic Install Shield Support Libraries 03 Basic Add debug printing 04 Basic Add debug printing 05 Basic Use a pin interrupt 05 Basic Use a pin interrupt 06 Basic Read an input pin 06 Basic Read and season values over I2C 07 Basic Read potentiometer value via an ADC Advanced Advanced Advanced Display sensor info on the TFT display 09 Advanced Display sensor info on the TFT display 09 Advanced Display sensor info on the TFT display 09 Advanced Read a value using the standard UART functions 03 (RTOS) 01 Basic Create an LED blink thread Use a Semiphore Use a Multix Use a Oueue Use a Oueue Use a Oueue Use a Timer Use a Oueue		01 (Tour)	01	Basic	Create a forum account
02 (Peripherals)			02	Basic	Install ModusToolbox
02 Basic Blink an LED 03 Basic Add debug printing 04 Basic Read an input pin 05 Basic Use a pin interrupt 06 Basic Read son input pin 07 Basic Read son input pin 08 Advanced Office Read sensor values over I2C 09 Advanced Display sensor info on the TFT display 10 Advanced Display sensor info on the TFT display 11 Advanced Display sensor info on the TFT display 12 Advanced Write a value using the standard UART functions 13 Advanced Read a value using the standard UART functions 14 Advanced Use a Sulue using the standard UART functions 15 Advanced Use a Sulue using the standard UART functions 16 Advanced Use a Buffex 17 Use a Semaphore 18 Basic Create an LED blink thread 19 Advanced Use a Buffex 19 Advanced Use a Buffex 19 Advanced Use a Immer 10 Advanced Use a Timer 10 Advanced Use a Sulue Use a Semaphore 10 Advanced Use a Sulue Use a Semaphore 10 Advanced Use a Timer 10 Advanced Use a Sulue Use a Semaphore 10 Advanced Use a Timer 10 Advanced Use a Sulue Use a Semaphore 11 Basic Attach to an open network Use a Semaphore 12 Basic Attach to WPAZ PSK network 13 Advanced Use Advanced Use a Semaphore Description of the Server Using TCP streams 14 Advanced Use Advanced Use a Sew Sulth between Cane Note Server Using TCP streams 15 Advanced Use Advanced Use Server Using TCP Server Using Secure TLS sockets Implement a server for a single non-secure TCP connection Modify the client to use secure TLS sockets Implement a server for a single non-secure and secure sockets Implement a Server Using Secure TLS sockets Implement a Server Using Secure TLS sockets Use Advanced Use Advanced Use Advanced Use Advanced Use Advanced Use Advanced Use CURL to connect to https://httpbin.org 18 Basic Use CURL to connect to https://httpbin.org using TLS 18 Basic Use AnyCloud to post data to httpbin.org using TLS 18 Basic Use AnyCloud to post data to httpbin.org using TLS 19 Advanced Use Advanced Use Advanced Use Advanced Use Advanced Use Advanced U			03	Basic	Open the documentation
Basic Add debug printing		02 (Peripherals)	01	Basic	Install Shield Support Libraries
Description			02	Basic	Blink an LED
Description			03	Basic	Add debug printing
Read potentiometer value via an ADC			04	Basic	Read an input pin
07			05	Basic	Use a pin interrupt
O8			06	Basic	Read sensor values over I2C
Description			07	Basic	Read potentiometer value via an ADC
Description			08	Advanced	Adjust LED brightness
11			09	Advanced	
11			10		1 /
O3 (RTOS) O1 Basic Create an LED blink thread					
Use a semaphore Use a MUTEX Use a Jewe Use a Timer O4 (AnyCloud) O1 Basic Parse ISON using JSON Parser O5 (Wi-Fi) O1 Basic Attach to WPA2 PSK network O2 Advanced Switch to an open network O3 Basic Print network information to a terminal O4 Advanced Switch between 2 networks within the application O6A (Sockets) O1 Basic Modify the client to inspect return code from the server Using TCP streams Modify the client to inspect return code from the server Using TCP streams Modify the Client to inspect return code from the server Using TCP streams Modify the Client to inspect return code from the server Using TCP streams Modify the Client to inspect return code from the server Using TCP streams Modify the Client to use secure TCP connection Using TCP streams Modify the Client to use secure TCP connection Using TCP streams Modify the Client to use secure TCP connection Using TCP streams Modify the Client to use secure TCP connection Using TCP streams Using TCP		03 (RTOS)			
O3		55 (55)			
O4 (AnyCloud)					·
O4 (AnyCloud) O1 Basic Parse JSON using JSON					
O4 (AnyCloud) O1					-
O5 (Wi-Fi) O1 Basic Attach to WPA2 PSK network		04 (ApyCloud)			
05 (Wi-Fi) 01 Basic Attach to WPA2 PSK network 02 Basic Attach to an open network 03 Basic Attach to an open network 04 Advanced Switch between 2 networks within the application 06A (Sockets) 01 Basic Implement a client to write data to the server using TCP streams 02 Basic Modify the client to inspect return code from the server 03 Advanced Implement a server for a single non-secure TCP connection 06B (TLS) 01 Basic Modify the client to use secure TLS sockets 02 Advanced Implement a server single secure TLS sockets 03 Advanced Implement a server that uses both non-secure and secure sockets 04 Advanced Implement a server that uses both non-secure and secure sockets 07B (HTTP) 01 Basic Use CURL to connect to https://httpbin.org using TLS 03 Basic Use CURL to connect to https://httpbin.org using TLS 03 Basic Use AnyCloud HTTPS client/server examples Use AnyCloud to get data from httpbin.org Use AnyCloud to get data from httpbin.org Use AnyCloud to post data to httpbin.org Use AnyCloud Use AnyCloud to post data to httpbin.org Use AnyCloud Use AnyCloud AnyCloud Use AnyCloud AnyCloud		04 (Arrycioda)			5
D2 Basic Attach to an open network		OE (\M; E;)			
Description		U3 (VVI-FI)			
O6A (Sockets)					·
D6A (Sockets) D1					
Description		OCA (Caalaata)			
Modify the client to use secure TCP connection		UDA (SUCKELS)			
O6B (TLS) O1 Basic Modify the client to use secure TLS sockets					
O2		OCD (TIC)			
D3		06B (1LS)			·
O4					
O7B (HTTP)					·
D2 Basic Use CURL to connect to https://httpbin.org using TLS		(::===)			'
03 Basic Run the AnyCloud HTTPS client/server examples		07B (HTTP)			
04 Basic Use AnyCloud to get data from httpbin.org					
D5 Basic Use AnyCloud to get data from httpbin.org using TLS					
Description					· · · · · · · · · · · · · · · · · · ·
Description					
08 Advanced Use a WEB API for getting weather conditions 09 Advanced Control a Virtual LED on Initial State using APIARY and CURL 10 Advanced Control a Virtual LED on Initial State using a button on the board 11 Advanced Send potentiometer position to initial state 12 Advanced Graph potentiometer position on Initial State 7C (MQTT and AWS) 01 Basic Run the AWS Tutorial 02 Basic Provision a new thing in the AWS IOT cloud 03 Basic Use the Test terminal on the AWS website 04 Basic Build and run the AnyCloud MQTT client example 05 Basic Explain the example application firmware flow 06 Basic Publish from the AWS Test MQTT Client 07 Advanced Implement the publisher and subscriber in 2 different kits and test					, , , , , ,
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07 Advanced Implement the publisher and subscriber in 2 different kits and test			05	Basic	Explain the example application firmware flow
			06	Basic	Publish from the AWS Test MQTT Client
08 Advanced Get the shadow of your <i>thing</i> from AWS using HTTPS			07	Advanced	Implement the publisher and subscriber in 2 different kits and test
			08	Advanced	Get the shadow of your <i>thing</i> from AWS using HTTPS