

Chapter number	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	If proprietary, then cost of the software	Download links to the software	Hardware specifications	OS required
2	Pycharm	Free			https://www.jetbrains.com/pycharm/		Windows, Linux, Mac OS
2	PuTTY	Free			https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html		Windows, Linux, Mac OS
2						Pyboard	
3						Pyboard	
3						Robotdyn I2C 8-bit PCA8574 I/O Expander	
3						Adafruit RGB Pushbutton PN: 3423 or equivalent	
4						Same as Chapter 3	
5	Linux Virtual Machine	Free			https://ubuntu.com/download/desktop		Windows, Linux, Mac OS
5						STM32L4 IoT Discovery Node	
						Robotdyn I2C 8-bit PCA8574 I/O Expander	
5						Adafruit RGB Pushbutton PN: 3423 or equivalent	

6	Python 3.x						Windows, Linux, Mac OS
6						USB to UART Converter	
7						Adafruit ADPS9960 Break-out board	
7						MicroPython supported Development Board	
8						ESP32 WROVER-B	
8	Anaconda Terminal	Free			https://www.anaconda.com/distribution/		Windows, Linux, Mac OS
8	Simple TCP Socket Tester	Free			Android App Store		Android
9						OpenMV Camera Module	
9	OpenMV IDE	Free			https://openmv.io/pages/download		Windows, Linux, Mac OS