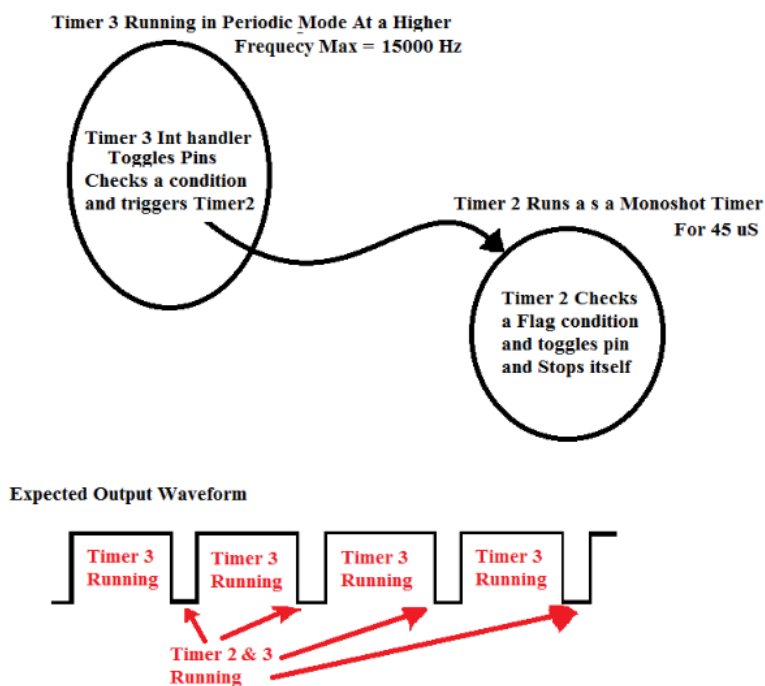# Executable files.

The execute files work in CCS application download it on the page *https://download.cnet.com/CCS-C-Compiler/3000-2212_4-76172170.html* of internet then we need to learn about basic introduction of the language for understand how it works after that we need to add three libraries (device, fuses and use) using some specifications about them.

For start the process of the code we begin including the name of the PIC because the program CCS can obtain the libraries and use them later, then we put a device "ADC" and we define that the code works with 10 bits also add "fuses" as the result of configure the PIC then add a delay with the purpose of the program knows about the crystal that we should use after that we define the legs of the PIC and incorporate a variable that we need to use in this case is "sensor", later put the function "timer3 interrupt" which reads the temperature and shows it in the LCD device.

Timer 3 Running in Periodic Mode At a Higher Frequecy Max = 15000 Hz

Timer 3 Int handler Toggles Pins Checks a condition and triggers Timer2

Timer 2 Runs a s a Monoshot Timer For 45 uS

Timer 2 Checks a Flag condition and toggles pin and Stops itself

Expected Output Waveform

Timer 3 Running **Timer 3 Running** **Timer 3 Running** **Timer 3 Running**

Timer 2 & 3 Running

The timer3 is important because serve to read data in certain time without disable to the pic for that we get the temperature in real time and that picture shows how to work and the waveform.

Put on a command with the end of read the temperature every second and we collocate that read the current of the temperature (and it is reading on millivolts or mV), after we indicate a multiplication

between the current of the temperature and 0.488 (it is the quantity in each bit). Later we indicate where is going to lay respect with the LCD screen.

Then we print the previous result that is the temperature, after we indicate the "timer3" clean it every 25 seconds as a result this do the temperature more exactly.

Ultimately, determine all the features that we need for example:

- The timer3 we send it to work with the internal clock
- Next timer3 is to over float 25 milliseconds enable
- Enable an interrupt by timer3
- Enable the global interrupts
- The timer3 is clean
- The ADC is set to work with the internal clock
- The ADC is set to use one port (First port)
- Here, we indicate which of the ports we need to use as we said the last feature
- The LCD is initialized