# Laboratory 02 – 7 Segment LED

*If you have not completed your previous lab, carry on with that and make sure you understand all the codes.*

Task 1: Use assembler language to write codes to drive and display numbers ‘1’ across all 6 LEDs.

Resources you will need (all on Canvas site):

* PIC datasheet
* QL200\_SCH.pdf
* 7 Segment LED section arraignment diagram



Tips:

* Both PortA and PortD should be configured as output.
* Reuse the headers and code structures from previous labs;
* Configure PORTA as digital mode
* Flip the switches connecting the 7 Segment LEDs to on.
* Workout the numbers – pins mapping by hands

Task 2: Show different numbers on different LED sections simultaneously, e.g. 12345

Tips:

* use the delay function you created from Lab 1
* The LED sections need to be turn on one at a time, and alternating each section.

Task 3: User the 7 segment LED for counting from 0 to 999999.

Task 4: Counting from 0.001 to 9.999