DSP_laboratory Problems

1. Develop a dspic executable program that will generate a series 2, 5, 8, 11,14,17,... and store in the memory.

2. Develop a dspic executable program that will sort the given series in ascending/descending order. (The series is:1, 34, 5,21,1, 2, 13, 3,55,89,8)

3. Develop a dspic executable program that will identify the minimum/maximum values in the given series and stores in memory location. (The series is:1, 34, 5,21,1, 2, 13, 3,55,89,8)

4. Develop a dspic executable program that will add two given (3x3) matrices and the result stores in a specified memory location.

5. Develop a dspic executable program (i) that will generate a FIBONACCI series, (ii) average of the above series and stores in the memory.

6. Develop a dspic executable program to generate 100 kHz/50 kHz PWM signal using "I/O pins".

7. Develop a dspic executable program to generate 100 kHz/50 kHz PWM using PWM-channels of the processor.

8. Develop a dspic executable program to generate 100 kHz PWM on the two PWM-channels of the processor with phase difference of (Ts/2, where f_s: 100 kHz).

9. Develop a dspic executable program to generate two PWM signals on the "I/O pins" with finite time delay between them.

10. Develop a dspic executable program to sense the external voltage signal using on-chip ADC and stores in the memory.