Programming Assignment 1

Note:

Assignment should be submitted as a zip file containing keil projects. Each program should have separate folder. Create single ZIP file contacting all 15 folders for the assignment.

Should be submitted on or before 20/9/19

1. Write an assembly language program to find the sum of first 10 numbers.
2. Write an assembly language program to check the number as a prime number.
3. Write an assembly language program to sort the positive and negative number and store at different memory locations.
4. Write an assembly language program to find the probability of occurrence of each number in a array of 20 numbers. (Hint: check instruction 'db', it stores an array of numbers in defined memory location.)
5. Write an assembly language program to generate delay of 500micro seconds without using timers.
6. Write an assembly language program to toggle led connected at P1.0.
7. Write an assembly language program to on/off the led (P1.0) as per the status of the switch connected at P1.2.
8. Write an assembly language program to generate square wave of 1KHz at pin P1.2 without using timers.
9. Write an assembly language program to generate delay of 500micro seconds using timers.
10. Write an assembly language program to generate square wave of 1KHz at pin P1.2 using timers.
11. Write an assembly language program to generate square wave having 66.66% duty cycle and period of 1second using (a) Two timers (b) One timer.
12. Write an assembly language program to generate square wave at P1.5 of period 100 microsecond using auto reload mode.
13. Write an assembly language program to find the frequency of the signal connected to Pin 14, using mode 1.
14. Write an assembly language program to find the frequency of the signal connected to Pin 15, using mode 2.
15. Write an assembly language program to toggle a led connected at P1.0 after each 20 pulses sensed at pin 14.