Experiments in Microprocessor Lab

Time: 2 weeks.   **Problem Sheet #2**

1. Two numbers EA_H and BD_H are stored in 2050_H and 2051_H, respectively. Write a program to assemble them as AB_H and store it in 2052_H.

2. Two numbers A & B are stored in 2050_H and 2051_H, respectively. Write a program to perform A×B and store the result in 2052_H and 2053_H.

3. Repeat 2 for a BCD number.

4. N numbers are stored in consecutive m/m location starting from 2050_H. The value N is stored in $204F_H$.

    i)   Find the maximum among the N numbers.

    ii)   Find the minimum among the N numbers.

    iii) Sort the N numbers in ascending order.

    iv)   Sort the N numbers in descending order.

5. N numbers are stored in consecutive m/m location starting from 2050_H. The value N is stored in $204F_H$. Write a program to copy the even and odd numbers starting from 2100_H and 2200_H, respectively. Store the total no. of even and odd numbers in 2300_H and 2201_H, respectively.

6. N numbers are stored in consecutive m/m location starting from 2050_H. The value N is stored in $204F_H$. Write a program to test whether a number stored in $204E_H$ is present in the list. If present, store its position in the list at $204D_H$; otherwise store FF_H.