LAB-7

AIM: DEMONSTRATE THE USE OF LOOPING, COMPARISON, AND BRANCHING INSTRUCTIONS IN 8085 ASSEMBLY LANGUAGE TO MANIPULATE DATA AND PERFORM MATHEMATICAL OPERATIONS.

1. **Write an 8085 assembly language program to find the largest number in an array of data.**
   INPUT:
   (2201H) = 08 (Array Size)
   (2202H) = 45
   (2203H) = 67
   (2204H) = 15
   (2205H) = 07
   (2206H) = FE
   (2207H) = 78
   (2208H) = 21
   (2209H) = 63
   OUTPUT:
   (220AH) = FE

2. **Write an 8085 assembly language program to find the smallest number in an array of data.**
   INPUT: (Take the above data). **OUTPUT**: (220AH) = 07

3. **Write an 8085 assembly language program to sort the data in ascending order.**
   Data(H): 63, 41, 56, 62, 48, 5A, 4F, 4C, 56, 56

4. **Write an 8085 assembly language program to sort an array containing the set of marks scored by 10 students in a Computer system course in descending order.**
   Data(H): Take the above data

5. **The following block of Data is stored starting from the memory location XX50H to XX5AH. Write an 8085 Assembly Language Program to transfer the data to a new location XX00H to XX05H in reverse order.**
   DATA(H): 22,A5,B2,99,7F,37