Assignment-2

1. Draw the architecture of µP 8085.
2. Specify the output at memory address 8052H, if the following program is executed
   a. MVI B, 05
   b. MVI C, 06
   c. MVI D, 04
   d. MOV A, B
   e. ADD C
   f. ADD D
   g. STA 8052H
   h. HLT
3. Write a program to store 8-bit data in memory using direct addressing.
4. Write a program in 8085 microprocessor to find the sum of digits of an 8-bit number.
   > Example: Input: 54
   >   Output: 09 as 05+04=09
5. How does the microprocessor differentiate between data and instruction?
6. Write a program in 8085 microprocessor to find the square root of a number.
   > Example: Input: 09
   >   Output: 03
7. Write a program for calculating the factorial of a number using the 8085 microprocessor.
   > Example: Input: 05H
   >   Output: 78H as 05*04*03*02*01 = 120 in decimal => 78H
8. Write a program to add the contents of two memory locations.
   > Example: 0050H: 5DH
   >   0054H: 6AH
   >   Output: 5D+6A= C7H
9. Write a program for Finding 1's complement of a number.
   > Example: Input = 69 H = 0110 1001
   >   One's complement = 1001 0110 = 96 H
   >   Output = 96 H
10. Write a program to find smaller of two numbers
    > Example: (6501H) = 75 H
    >   (6502H) = A4 H
    >   Output = 75 H