**Practical ISE: - Program list**

1. Write a program to add 2 no. stored at memory address C000H and C010H. The sum should be stored at C020H.
2. Write a program to Subtract 2 no. stored at memory address C000H and C010H. The Sub should be stored at C020H.
3. Write a program to perform 16 bit subtraction on data stored in following format and store the result as specified

C200 LSB data1

C201 MSB data1

C202 LSB data2

C203 MSB data2

C204 LSB Result

C205 MSB Result

1. Write a program to perform 16 bit Addition on data stored in following format and store the result as specified

C200 LSB data1

C201 MSB data1

C202 LSB data2

C203 MSB data2

C204 LSB Result

C205 MSB Result

1. Write a program to find 1’s compliment of FOH data. The data must be loaded in register B and so should the 1’s compliment.
2. Write a program to find 2’s complement of 20H data. Assume suitable registers.
3. Write a program to find 16 bit 2’s complement of 4580H
4. Write a program to add two BCD no. 08 and 06. Assume suitable registers. Result should be in BCD format.
5. Write a program to add two digit BCD no. Assume data already exists in BC and DE pairs.
6. Write a program to shift 16 bits of no one bit left. The number is stored in memory location C201H and C202H.The result is to be stored in memory locations C203H and C204H
7. Write a program to mask least significant four bits of an 8 bit data. Data is stored at location C300H.
8. Write a program to mask most significant four bits of an 8 bit data available in B reg. Store the answer in C reg.
9. Write a program to find a square of a number 0 to 9 using look uo table method. The no is stored at location C200. Result should be stored at C201H
10. Write program to find a greater number out of given 2 no. The two nos are stored at locations C200 and C201.Store the result in accumulator.
11. Write a program to find sum of first 10 successive numbers from 1to 10.
12. Write a program to find the square of a number. The number is 09 the result should be in BCD format.
13. Write a program add ten data bytes. Data is stored in memory locations starting from C200. The result is 8 bits only. Store the result at C300 location.
14. Write a program to add ten data bytes. Data is stored in memory locations starting from c300 onwards. The result may be 16 bits. Store the LSB result at C3FE and MSB result at C3FF locations.
15. Write a program to add first 10 even hex. Nos. Store the result in Dreg.
16. Write a program to transfer 16 bytes of data stored in location at C250 to C25F to new memory locations starting from C300 on words.
17. Write a program to transfer 16 bytes of data stored in location at C250 to C25F. The data is stored in memory from C570 to C57F in reverse order.
18. Write a program to count number of ‘1’ and ‘0’ bits in a register. Assume data is in C register

And store no of ‘1’ in D register,’0’ in E register.

1. Write a program to find positive no in an array of 10 elements. Assume array starts from C200 onwards. Store result at C300.
2. Write a program to find negative no in an array of 10 elements. Assume array starts from C200 onwards. Store result at C300.
3. Write a program to find the largest no in give array of 16 elements. The array is stored in memory from C200H onwards. Store the result at the end of the array.
4. Write a program to find the smallest no in give array of 16 elements. The array is stored in memory from C200H onwards. Store the result at the end of the array.

**NOTE: Prepare all program lists with their flowchart.**