

Sister Nibedita Govt. General Degree College for Girls

Department of Computer Science

Assignment: Microprocessor and its Applications (CC-10)

2020

1. Write an assembly language program for 8085 microprocessor to add two 8-bit numbers and the result can be 16-bit.
2. Write an assembly language program for 8085 microprocessor to subtract two 8-bit numbers.
3. Write an assembly language program for 8085 microprocessor to add two 16-bit numbers and the result can be 24-bit.
4. Write an assembly language program for 8085 microprocessor to subtract two 8-bit numbers.
5. Write an assembly language program for 8085 microprocessor to find the 2's compliment of an 8-bit number stored in memory location 3000H.
6. Write an assembly language program for 8085 microprocessor to copy a block of 10 numbers stored in memory location starting from 2500H to another location starting from 3500H.
7. Write an assembly language program for 8085 microprocessor to count the number of non-zero numbers present in a block of 10 numbers.
8. Write an assembly language program for 8085 microprocessor to count the number of even and odd numbers present in an array stored in memory location starting at 3000H.
9. Write an assembly language program for 8085 microprocessor to count the positive numbers present in an array of 10 numbers.
10. Write an assembly language program for 8085 microprocessor to multiply two 8-bit numbers using repeated addition method.
11. Write an assembly language program for 8085 microprocessor to perform division of two 8-bit numbers using repeated subtraction.
12. Write an assembly language program for 8085 microprocessor to compute the sum of even and odd numbers separately from an array of 10 numbers.
13. Write an assembly language program for 8085 microprocessor to find the maximum and minimum value from an array.

14. Write an assembly language program for 8085 microprocessor to find square root of an 8-bit number.
15. Write an assembly language program for 8085 microprocessor to store the two 4-bit nibbles of an 8-bit number separately in two different memory locations.
16. Write an assembly language program for 8085 microprocessor to perform bubble sort on an array of numbers.
17. Write an assembly language program for 8085 microprocessor to compute the factorial of a number (both iteratively and recursively in two separate experiments).
18. Write an assembly language program for 8085 microprocessor to compute nCr using function.
19. Write an assembly language program for 8085 microprocessor to compute the sum of the following series recursively: $1 + 2 + 3 + \dots + n$
20. Write an assembly language program for 8085 microprocessor to compute the GCD of two 8-bit numbers.
21. Write an assembly language program for 8085 microprocessor to perform Binary to Gray code conversion and vice-versa.
22. Write an assembly language program for 8085 microprocessor to perform multiplication of two 8-bit numbers using shift-and-add method.
23. Write an assembly language program for 8085 microprocessor to compute the sum of an array of 10 BCD numbers.
24. Write an assembly language program for 8085 microprocessor to compliment the content of the flag register and store it in 3050H memory location.

For any query, please contact Dr. Angana Chakraborty at [angana89\[at\]gmail\[dot\]com](mailto:angana89[at]gmail[dot]com)