## ASSEMBLY LANGUAGE PRACTICE PROBLEM SHEET

- 1. Write an assembly language program to print a message.
- 2. Write an assembly language program to take input from the user and print that value.
- 3. Write an assembly language program to perform addition and print a 2-digit result with/without using the AAA instruction.
- 4. Write an assembly language program to perform subtraction and print a 2-digit result with/without using the AAA instruction.
- 5. Write an assembly language program to perform multiplication and print a 2-digit result with/without using the AAA instruction.
- 6. Write an assembly language program to perform division and print a 2-digit result of the dividend and remainder, with/without using the AAA instruction.
- 7. Write an assembly language program to convert Celsius to Fahrenheit/Vice Versa.
- 8. Write an assembly language program to check Leap year or not.
- 9. Write an assembly language program to check whether a number is positive or negative.
- 10. Write an assembly language program to check whether a number is even or odd.
- 11. Write an assembly language program to find the greatest number among three.
- 12. Write an assembly language program to check if a Number is Prime or not.
- 13. Write an assembly language program to find the Sum of the First N Natural Numbers.
- 14. Write an assembly language program to find the Factorial of a Number.
- 15. Write an assembly language program to take input from the user in an array and print that value.
- 16. Write an assembly language program to find the largest/smallest number in an array.
- 17. Write an assembly language program to reverse a string, with/without using the stack.
- 18. Write an assembly language program to check if a number is a palindrome or not.
- 19. Write an assembly language program to check if a string is a palindrome or not.
- 20. Write an assembly language program to print the grade of a student from 0-100 marks. (80>=A+; 70-79>=A; 60-69>=A-; 50-59>=B; 40-49>=C; 40<=F)
- 21. Write an assembly language program to perform Addition and Substruction using Function.

(N.B: Each mathematical operation will perform up to 2 digits. As 8086 is 16 processor, it cannot operate more than 2 digits.)