List of Lab Experiments (Computer Organization and Architecture)

Week-1

1. Write a program in assembly language to print “Hello World”.

Practice set:

2. Write an assembly language program to print your name.

Week-2

3. Write an assembly language program to perform addition of 8-bit data.

Practice set:

4. Write a program in assembly language to perform addition of 16-bit data.

Week-3

5. Write a program in assembly language to perform subtraction of 8-bit data.

Practice set:

6. Write an assembly language program to perform subtraction of 16-bit data.

Week-4

7. Write an assembly language program to perform multiplication of 8-bit data.

Practice set:

8. Write a program in assembly language to perform multiplication of 16-bit data.

Week-5

9. Write a program in assembly language to perform division of 8-bit data.

Practice set:

10. Write an assembly language program to perform division of 16-bit data.

Week-6

11. (a) Write a program in assembly language to print a single character on screen.
(b) Write an assembly language program to convert an upper-case letter to the corresponding lower-case letter.

Practice set:

12. (a) Write a program in assembly language to print multiple characters on screen.
(b) Write an assembly language program to convert a lower-case letter to the corresponding upper-case letter.

Week-7

13. Write a program in assembly language to take a single-digit integer from the user and print it on the screen.

Practice set:

14. Write a program in assembly language to take two single-digit integers from the user and print the result of subtraction on the screen.

Week-8

15. Write a program in assembly language to display a two-digit number on the screen. The two-digits number is required to be taken in the program itself.

Practice Set:
16. Write an assembly language program to take two single-digit integers from the user and print the result of addition on the screen.

Week-9

17. Write a program in assembly language to take two single-digit numbers as input and display whether they are equal or not.

Practice set:
18. Write a program in assembly language to check whether a single-digit number is odd or even.

Week-10

19. (a) Write a program in assembly language to print the numbers from 0 to 9.
(b) Write an assembly language program to print the characters from A to Z in reverse order.

Practice set:
20. (a) Write a program in assembly language to print the numbers from 0 to 9 in reverse order.
(b) Write an assembly language program to print the characters from A to Z.

Week-11

21. (a) Write a program in assembly language to find L.C.M of two single-digit numbers.
(b) Write an assembly language program to display the nth term of a Fibonacci series. “n” must be a single digit number which may be taken from the user.

Practice set:
22. Write an assembly language program to find the factorial of a given single-digit number.

Week-12

23. (a) Write an assembly language program to take and store 10 single-digit numbers in an array. Subsequently, print all the elements of the array on screen.
(b) Write a program in assembly language to find the largest number in an array containing a set of single-digit integers.

Practice set:
24. Write a program in assembly language to find the average of numbers stored in an array containing a set of single-digit integers.

Week-13

25. Write a program in assembly language to sort a set of single-digit numbers in ascending order.

Practice set:
26. Write an assembly language program to sort a set of single-digit numbers in descending order.