**Jadavpur University**

**System Programming Lab**

**Assignment 1**

1. Write and test a MASM program to Display your name and program title on the output screen.
2. Write and test a MASM program to convert a letter from uppercase to lowercase.
3. Write and test a MASM program to add two Hexadecimal Numbers.
4. Write and test a MASM program to find the second max and second min from an array.
5. Write and test a MASM program to display a terminating message.
6. Write and test a MASM program to Take a character from keyboard and print it.
7. Write and test a MASM program to validate second numbers is less than the first.
8. Write and test a MASM program to find maximum and minimum from an array.
9. Write and test a MASM program to loop until the user decides to quit
10. Write and test a MASM program to print all the characters from A-Z.

**Jadavpur University**

**System Programming Lab**

**Assignment 2**

1. Write and test a program to add and subtract two 16 bit numbers.
2. Write and test a program to Convert a Binary digit to Decimal and vice versa.
3. Write and test a program to print pairs of even numbers where the summation of the numbers in each pair is 100.
4. Write and test a program to multiply two 8 bit numbers.
5. Write and test a program to Convert Binary digit to Hex digit and vice versa.
6. Write and test a program to divide a 16 bit number by a 8 bit number.
7. Write and test a program to Print Fibonacci series up to 10 terms.
8. Write and test a program for sub-string deletion from a given string.
9. Write and test a program to identify the GCD and LCM of three numbers.
10. Write and test a program to Implement Linear search.

**Jadavpur University**

**System Programming Lab**

**Assignment 3**

1. Write and test a MASM program to Implement Binary search. Show the steps. Each step will be succeeded by “***Enter***” key.
2. Write and test a MASM program to Implement Selection Sort. Show the steps. Each step will be succeeded by “***Enter***” key. The Program will terminate when the “***Esc***” key is pressed.
3. Write and test a MASM program to wait for left mouse clicks and display a text string at the exact clicked spot in the client area.