CSE3212: Software Engineering Lab

UML Diagram:

- 1. Class diagram
- 2. Use case Diagram
- 3. Sequence Diagram
- 4. Collaboration Diagram
- 5. State Chart diagram
- 6. Activity Diagram
- 7. Component Diagram
- 8. Deployment Diagram

E-R Model

CSE3222: Computer Graphics Lab Task List

- 1. Draw a National Flag
- 2. Hidden Surface Elimination
- 3. Translation, Rotation, Scaling
- 4. Sphere, Ellipsoid, Torus draw
- 5. Superellipsoid, Superellipse draw
- 6. Bezier curve draw
- 7. Bresenham's line drawing
- 8. Midpoint circle drawing
- 9. Cohen Sutherland line clipping algorithm
- 10. Sutherland-Hodgeman polygon clipping algorithm
- 11. Fractal Geometry

CSE3232: Microprocessor and Assembly Language Lab

String Processing:

		Case Conversion and String Reversal Problems.
1.	(a)	Write an assembly language program to implement a case conversion program that will read a string (a line of characters of letters, digits, punctuation symbols, and others) as input and then convert the letters into its opposite case as output. Here, the characters which are not belonged to letters will remain be unchanged. Your program must contain necessary messages for formatted input and output.
	(b)	Write an assembly language program to implement a string reversal program that will read a string (a line of characters of letters, digits, punctuation symbols, and others) as input and then make the reverse form of the string as output. You have to solve this problem in two ways such as (i) using array (ii) using stack. Your program must contain necessary messages for formatted input and output.
		String Searching Problems.
2.	(a)	Write an assembly language program to implement a searching program that will read a string (a line of letters of English alphabet) as input and then find out the first capital letter which is occurred first and last capital letter which is occurred last in the alphabetical order as output. Your program will display a message with "No Capitals" when there is no capital letter in the string. Your program must contain necessary messages for formatted input and output.
	(b)	Write an assembly language program to implement a searching program that will read a string (a word of letters of English alphabet either all in uppercase or all in lowercase but not both) as input and then find out the longest sequence of letters in the word in alphabetical order. Your program must contain necessary messages for formatted input and output.
	(c)	Write an assembly language program to implement a searching program that will read two strings (two words of letters of English alphabet either all in uppercases or all in lowercases but not both) as input and then determine whether a string is a substring of another string or not. Your program must contain necessary messages for formatted input and output.
		Counting and Sorting Problems.
3.	(a)	Write an assembly language program to implement a counting program that will read a string (a line of characters of letters, digits, punctuation symbols, and others) as input and then count the number of Vowels, Consonants, Digits, and Spaces in the string as output. Your program must contain necessary messages for formatted input and output.

(b) Write an assembly language program to implement a sorting program that will read a string (a word of letters of English alphabet either all in uppercase or all in lowercase but not both) as input and then sort the letters in the word in alphabetically (i) ascending order (ii) descending order. Your program must contain necessary messages for formatted input and output.

Number Processing:

		Series Summation and Factorial Calculation Problems.
1.	(a)	Write an assembly language program to implement a series summation program that will read a number N of single decimal digit (from 1 to 3) as input and then calculate the summation value of the series $1 + 2 + \cdots + N$. Your program must contain necessary messages for formatted input and output.
	(b)	Write an assembly language program to implement a factorial calculation program that will read a number N of single decimal digit (from 0 to 3) as input and then determine the factorial value of N. Your program must contain necessary messages for formatted input and output.
		Even Odd and Prime Number Testing Problems
	()	Even-Odd and Prime Number Testing Problems.
2.	(a)	Write an assembly language program to implement an even-odd testing program that will read a number N of single decimal digit (from 0 to 9) as input and then determine whether N is an even number or an odd number. Your program must contain necessary messages for formatted input and output.
	(b)	Write an assembly language program to implement a prime number testing program that will read a number N of single decimal digit (from 0 to 9) as input and then determine whether N is a prime number or not. Your program must contain necessary messages for formatted input and output.
		Conting Duchlam
	()	Sorting Problem.
3.	(a)	Write an assembly language program to implement a sorting program that will read an array of numbers of single decimal digits (from 0 to 9) as input and then sort the numbers in (i) ascending order (ii) descending order as output. Your program must contain necessary messages for formatted input and output.

CSE3242: Operating System & System Programming Lab

RU Sir Marked Questions

- 1. To write a C program to simulate the create, delete, copy, and move file operation functions of an operating system.
- 2. To write a C program for implementation of Priority scheduling algorithm.
- 3. To write a C program for implementation of Round Robin scheduling algorithm
- 4. To write a C program for implementation of FCFS scheduling algorithm.
- 5. To write a C program for implementation of SJF scheduling algorithm.
- 6. To write a C program to implement banker's algorithm for deadlock avoidance.
- 7. To write a C program to implement algorithm for deadlock detection.
- 9. To write a C program for implementation memory allocation methods for fixed partition using first fit.
- 10. To write a C program for implementation memory allocation methods for fixed partition using best fit.
- 11. To write a C program for implementation memory allocation methods for fixed partition using worst fit
- 13. To write a C program for implementation of FIFO page replacement algorithm.
- 14. To write a c program to implement LRU page replacement algorithm.
- 15. To write C program to implement LFU page replacement algorithm.

Not Marked

- 8. To write a c program to implement Threading and Synchronization Applications.
- 12. To write a c program to implement Paging technique for memory management.
- 16. To write C program to implement Second-chance/Enhanced Second-chance page replacement algorithm.
- 17. To write C program to organize the file using single level directory.
- 18. To write C program to organize the file using two level directory.

ICE-3262: Communication Engineering Lab

Experiment List:

- 1. Basic concepts of analog/digital signal, composite signal.
- 2. Implementation of modulation and demodulation for the following line coding techniques:
 - a. Unipolar NRZ
 - b. Polar NRZ-L NRZ-I,
 - c. Polar RZ, Manchester, Differential Manchester and
 - d. Bipolar AMI
 - e. Multi-transition MLT-3
- 3. Implementation of encoding and decoding using B8ZS and HDB3 scrambling techniques.
- 4. Implementation of modulation and demodulation using ASK, FSK and PSK.
- 5. Implementation of modulation and demodulation using AM, FM and PM