

Programming for problem solving-II Lab

Labs/PPS-II

List of Programs:

Week 1 & Week 2

Write a 'C' program to implement a List using Arrays and Functions [Insertion, Deletion]

Week 3

- a) Define a structure Student with members Hall Ticket Number (htno), name(sname), program studying (program), current year (cyear) and semester (csem). Write a 'C' program to read a student details using user defined function read_student() and display the student details using print_student.
- b) Define a structure Date with members' day, month and year. Define a structure Employee with members' employee number (empno), employee name (empname), date of birth (dob) (Use the Structure Date), department number (deptno), salary(sal). Define the user-defined functions read_employee() to read employee details and print_employee() to print the employee details. Structure Date should be used as a Nested Structure in the Structure Employee. Write a 'C' program to read and display details of an employee using user-defined functions read_employee and print_employee.

Week 4

- a) Define a structure Point with members x-coordinate and y-coordinate. Compute distance and slope between two given points using array of structures and functions.
- b) Define a union Student with members Hall Ticket Number (htno), name(sname), program studying (program), current year (cyear) and semester (csem). Write a 'C' program to read a student details using user defined function read_student() and display the student details using print_student.

Week 5 & Week 6

- a) Write a 'C' program to compute length of a string using user –defined function string length. Pointer expression, Pointer Arithmetic and Pointer addressing should be used for computing string length.
- b) Write a 'C' program to read and print 3 x 3 matrix and also sum of elements of the matrix using pointer-to-pointer.

Week 7

Write a 'C' program to implementation of List of size n using Arrays. [Insertion and Deletion]

Week 8

Write a C Program to perform the operations of Stacks using Arrays

Week 9

Write a C Program to perform the operations of Queues using Arrays

Week 10

Write a C Program to perform the operations of Single Linked List Programs [Insertion, Deletion, Searching and traversing].

Week 11

- a) Write a C Program for Linear Search
- b) Write a C Program for Binary Search

Week 12

Write a C Program to Sort N numbers in either Ascending order or Descending order using Bubble Sort.

Week 13

Write a C Program to Sort N numbers in either Ascending order or Descending Order using Insertion Sort.

Week 14

Write a C Program to Sort N numbers in either Ascending Order or Descending order using Quick sort.

Week 15

- a) Write a C Program to count the number of Characters, Lines, Vowels and Consonants in a given text file
- b) Write a C Program to Display contents of a given file using Command Line Arguments

Week 16

Review