

Modern Education Society's Wadia College of Engineering, Pune

Department of Computer Engineering

List of Assignment

Subject:- Data Structures Laboratory

Year- 2023-24

Class:- S.E. Computer(Semester 1)

NOTE: Group Name should be written in index

(eg: Group A

[list of assignments]

Group B etc.)

Group A	
A1	Group A (Cricket), Group B (Badminton), Group C (Football): Write a Python program using functions to compute following: List of students who play both cricket and badminton, either cricket or badminton but not both, neither cricket nor badminton, cricket and football but not badminton.
A2	Write a Python program to store marks scored in a subject by N students in the class. Write functions to compute following: The average score of class, Highest score and lowest score of class, Count of students who were absent for the test, Display mark with highest frequency.
A5	Write a Python program to compute following operations on String: display word with the longest length, determines the frequency of occurrence of particular character in the string, check whether given string is palindrome or not, display index of first appearance of the substring, count the occurrences of each word in a given string.
Group B	
B11	Write C++ program to store roll numbers of student in array who attended training program in random order using linear search, sentinel search, binary search and Fibonacci search. Find Time complexity.
B14	Write C++ program to store first year percentage of students in array in ascending order using: a) Selection Sort b) Bubble Sort. Find time complexity
B16	Write C++ program to store first year percentage of students in array in ascending order using quick sort. Find time complexity
Group C	
C19	Write C++ program to maintain club member's information using singly linked list. Write functions to: Add and delete the members as well as president or even secretary, Compute total number of members of club, Display members, Two linked lists exists for two divisions. Concatenate two lists.
C20	The ticket booking system of Cinemax theater has to be implemented using C++ program. There are 10 rows and 7 seats in each row. On demand: The list of available seats is to be displayed, The seats are to be booked, The booking can be cancelled.
Group D	
D26	In any language program mostly syntax error occurs due to unbalancing delimiter such as {},[],(). Write C++ program using stack to check whether given expression is well parenthesized or not.
D27	Implement C++ program for expression conversion as infix to postfix and its evaluation using stack based on given conditions. (Only '+', '-', '*', '/' operators are expected.)
Group E	

E29	Write C++ program for simulating job queue. Write functions to add job and delete job from queue.
E31	Write C++ program to simulate deque with functions to add and delete elements from either end of the deque.
E32	Pizza parlor accepting maximum M orders. Orders are served in first come first served basis. Order once placed can not be cancelled. Write C++ program to simulate the system using circular queue using array
	Mini Project
	Home Assignment 1
	Home Assignment 2

Subject Teacher

Dr. S.P. Deore
 Prof. N. Gore
 Prof. S. Khade

Lab Incharge

Dr. S. P. Deore

HOD

Dr. N. F. Shaikh