

C Sample Assignment Questions



Q1. Menu driven program to add, delete, Modify records and Display record of the employee attendance in an IT company using binary file.

Q2. Write a program using dynamic memory allocation and pointers to construct an ordered doubly linked list based on the experience of the employee, where each node consists of the following information: Employee id (integer) ,Employee name (character string) and experience (integer) .

Q3. Write a C Program to construct a stack of integers and to perform the following operations on it

push

pop

display

The program should print appropriate messages for stack overflow, stack underflow and stack empty.

Q4. Write a program to using files to encrypt and decrypt .Use 2 separate files for output Use command line arguments.

Q5. Write a C program for searching a book in a library catalogue containing the following fields: Accno, title, publisher (use structure data type). The program should facilitate to both add book records as well as to search a particular book .The

searching is through (i) titlewise

(ii) authorwise

(iii) publisher wise

Q6. Write a function to generate the following pyramid of numbers

```
0
1 0 1
2 1 0 1 2
3 2 1 0 1 2 3
4 3 2 1 0 1 2 3 4
5 4 3 2 1 0 1 2 3 4 5
4 3 2 1 0 1 2 3 4
3 2 1 0 1 2 3
2 1 0 1 2
1 0 1
0
```

Q7. Write a program that maintains an address book. This program adds the detail of the contact to the file "add_book.dat" .The program also gives the user a choice of functions like

Add a contact

Display contact

Modify the details of a contact

Delete a contact

Q8. Write a program to sort a number of strings using bubble sort. Input is a number of strings and the output is the sorted list based on the length of strings.

For eg: If input is jyoti, sareeka, anisha, sangita, savita, suja

The output is suja, jyoti, anisha, savita, sareeka, sangita

Q9. Write a function `squeeze(s1,s2)` that deletes each character in string `s1` that matches any character in string `s2`.

Q10. Write a program to search a word from a text file.

- a. If the word is found print a message that the word is found along with the position of the word in the file.
- b. If the word is not found, print the message that the word is not found along with the total number of words in the file.

Q11. Using pointers write your own functions for the following:

- a. String comparison
- b. String concatenate
- c. String copy
- d. String length.

Note : Do not include `<string.h>` in your program

Q12. Write a program to maintain a singly linked list having the following functions:

- a. Creation of the list.
- b. Displaying the list.
- c. Traverse through the linked list and add contents of two consecutive nodes. The result should be inserted soon after the nodes added.

Note: If the linked list contains the data : 5 15 8 9 2 6

The new linked list should contain the data in the following order : 5 15 20 8 9 17 2 6 8.

Display both the original linked list as well as the new linked list.

Q13. Write a menu driven program the depicts the working of a CD Shop. The menu option should be:

1. Add CD information
2. Display CD information
3. List the count of the CD in the Shop
4. Exit

Q14. There are 10 records present in a file with the following structure:

```
struct
{
    char itemcode[6];
    char itemname [20];
    int qty;
};
```

Write a program to read these records and display them in ascending order on the field item name and write them into a text file in ascending order.

Q15. Write a menu driven program, which has following option:

- a. Reverse each line in the input file and store it in another file.
- b. Reverse each word in a file and store it in another file
- c. Display the file.