

1. Consider that you are given with a data base of employee records (at least 5). Each employee record having following information –

Emp_id(integer) Emp_name(string) Emp_city (string) Assume that Emp_id is unique.

{Use the structure for creating data base}

- A) Write a function to create a database of five employees. Here, data should be taken from the user.
- B) Write a function to find out the employee record from this data base on the base of Emp_id.
- C) Write a function to sort the employee records on the base of Emp_id.
- D) Write a function to count the number of employees in data base.
- E) d. Write a function to add 5 more records in data base.

2. WAP to find the number of occurrences of each element of an array in that array.

3. WAP to find the nth element of the fibonacci series using recursion.

4. WAP to reverse an array using pointers.

5. Write a program that will read a line and delete from it all occurrences of a particular word using pointers.

6. Write a program using functions to define a structure to describe a Book with attributes such as title, author, no. of pages, price, number of sold copies, total amount of sold copies etc. Declare an array of book and do the following operations:

- a. Reading book array and populating values in it.
- b. Printing book array and displaying each attribute of each book in the array.
- c. Find and print details of a book with maximum pages
- d. Find and print details of a book with minimum cost.
- e. Compute and store total amount of money earned by selling the books.

7. Write a C program to read the full name of the customers and their telephone numbers. Full name includes Surname followed by first name and then the middle name. Reconstruct the customer's full names with surname first followed by comma (,) and initials of the first and middle names. Display this customer list along with their telephone no.

E.g Ghokle Suraj Ram 9876512345

should be written as

Ghokle,S.R 9876512345

Input to the program:

Enter names and telephone numbers

sharma anil sudhir 1234

verma mona abhay 9876

garg sona abhi 7654

modak tinu pintu 9870

shree sahab sumit 8765

Output of the program:

Customer list

garg,s.a 7654

modak,t.p 9870

sharma,a.s 1234

shree,s.s 8765

verma,m.a 9876

8. Write a program to find and replace a pattern (series of characters) in a sentence. Sentence and pattern are taken from the user.

9. WAP to find and remove the duplicate occurrences of an element in an array and display the modified array.

10. Write a program to find an integer using following algorithms:

- a. Linear Search
- b. Binary Search (Take the sorted list as input)

11. Create an array of 10 elements using malloc functions. Further, read the array from user and print the array.

12. Write a program for matrix multiplication and matrix addition.

13. Write a program to perform various operations on 3D array i.e. Insertion, Deletion and Searching of element.

14. WAP to check matrix is Sparse matrix or not.