

Lab Task 10:

Task 1 :-

Bit wants to send his message (Password of Account) to byte, in order to avoid that no one can understand his message he used the code words. He only says to byte whatever will be written in given sentence, if you flip it right to left that will be its answer. Write a program in c (as displayed in output) using recursion.

```
Enter a sentence: gnidoC yppaH
Happy Coding
-----
Process exited after 44.09 seconds with return value 0
Press any key to continue . . .
```

Task 2 :-

Write a program in C to read and print its corresponding percentage from 1% to 100% using recursion.

```
Enter a value to split in percentage: 1100
1 Percent = 11.00
2 Percent = 22.00
3 Percent = 33.00
4 Percent = 44.00
5 Percent = 55.00
6 Percent = 66.00
7 Percent = 77.00
8 Percent = 88.00
9 Percent = 99.00
10 Percent = 110.00
11 Percent = 121.00
12 Percent = 132.00
13 Percent = 143.00
14 Percent = 154.00
15 Percent = 165.00
16 Percent = 176.00
17 Percent = 187.00
18 Percent = 198.00
19 Percent = 209.00
20 Percent = 220.00
```

Task 3:-

Create a structure to store details about cars in a dealership, including make, model, year, price, and mileage. Write a program that allows users to add new cars, display a list of available cars, and search for cars by make or model.

Task 4:-

Design a structure to store information about travel packages, including package name, destination, duration, cost, and number of seats available. Write a program that allows users to book a travel package and display available packages.

Task 5:-

Write a recursive function that calculates the sum of digits of a number. For example, if the input is 123, the output should be 6.

Task 6:-

Write a recursive function that takes a string as input and returns the reversed string.

Task 7:-

Write a recursive function bubble-sort that takes an array and its size. It performs the bubble sort algorithm by repeatedly comparing adjacent elements and swapping them if they are in the wrong order.

Task 8:-

Write a recursive function that takes an array and its size as input and prints all the elements.

Task 9:-

You are developing a simple system for managing employee data in a company. You need to store information about multiple employees, including their employee ID, name, department, and salary.

Your task is to write a C program that defines a structure to store the following details for each employee:

- Employee ID (an integer)
- Name (a string of up to 50 characters)
- Department (a string of up to 50 characters)
- Salary (a floating-point number)

The program should first ask the user for the number of employees to be entered. Then, for each employee, the program should prompt the user to enter their Employee ID, Name, Department, and Salary.

After collecting the data, the program should display all the information for each employee in a well-formatted manner.

You are required to:

- Use a structure to store the employee details.

- Prompt the user for input and store the data for multiple employees.

- Display the details of all employees after the data is entered.