

#### RISHABANATH ECE <2018ece0802@svce.ac.in>

### Fwd: Task on Functions

1 message

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Tue, Aug 30, 2022 at 2:43 PM

To: 2018ece0802@svce.ac.in

----- Forwarded message ------

From: Umamageswari D <umamageswari.d@zohocorp.com>

Date: Tue, Aug 30, 2022, 2:31 PM Subject: Re: Task on Functions

To: rishabanath <rishabanath@gmail.com>, sanjayaravinth26 <sanjayaravinth26@gmail.com>, stormsandy91 <stormsandy91@gmail.com>, ruthrafirey@gmail.com>, rrvignesh2001 <rrvignesh2001@gmail.com>

## **Arrays, Structures and Unions**

#### Task-1

- 1. Create an array that contains "yourname" where add 1 to the content of odd-numbered locations and subtract 1 from the even-numbered locations.
- 2. Create a Sparse matrix and find out the locations where 1's are there.
- 3. Write a program to illustrate padding in structure with an example.
- 4. Write a program to illustrate packing in structure with an example.
- 5. Create an array that contains any string, where remove all occurrences of any special characters and spaces and find the length of the string w/o using strlen().
- 6. Create an adjacency matrix, where '1' represents the edges of a graph from i -> j, also use i != j as a constraint and find the number of incoming and out going edges of each vertex.
- 7. Program to evaluate the balanced parenthesis using stack.
- 8. Program to evaluate an arithmetic expression using stack.
- 9. Program to implement Queue.
- 10. Program to create a binary search tree using arrays.

#### Task-2

- 1. Add two distances and also convert inches into feet and vice-versa using structure (in inch-feet)
- 2. Build the basic management application by your own choice using functions.
- 3. Add two complex numbers using structure and functions to read, add and write the data.
- 4. Create a structure called Date and calculate the difference between the two dates.
- 5. Create a structure called Time and convert the time into hours or minutes or seconds.
- 6. Write a c program to read and print an employee's details like name, employee id, salary using structure.
- 7. Create a structure student having data members to store roll number, name of student, name of three subjects, max marks and minimum marks. Declare a structure variable of student provide facilities to input data in data member and display result of student.
- 8. Create a user defined enum type for days of week and display all.
- 9. C program to declare, initialize the data and display any union datatype.

# Strings(Learn by yourself)

## Task 3

- 1. Write a c program to perform string manipulation by using the library function.
- 2. Write a program to check whether the entered string is palindrome or not.
- 3. Concatenate two strings using arrays.
- 4. Count the total number of words in a string.
- 5. C program to count occurrences of a character in a string.
- ---- On Fri, 26 Aug 2022 17:05:54 +0530 Umamageswari D <umamageswari.d@zohocorp.com> wrote ---

# <u>Day-2</u>

# **Functions**

### Task-1

- 1. Program to find the sum of n numbers using recursive call.
- 2. Program to reverse a string using a stack.
- 3. Program to swap two numbers using pass by address and pass by value.
- 4. Write a program to find the power of a number  $X^n$  using call by address and call by value.
- 5. Calculate the volume through inline function.
- 6. Write a program to find factorial of a number using recursion.
- 7. Write a C program to calculate power using recursion.
- 8. Write a program that uses macros to find the maximum and minimum of three numbers.
- 9. Write a C program that uses a menu showing all the operations done using macros where the operations are
  - a. Find the maximum of two numbers using ternary operator.
  - b. Find the Cube of a numbers where use Square of a number also. Ex: Square(x) \* x;
  - c. Find the Power of a number  $X^n$ .
  - d. Find Product of two numbers without using \* operator.

## Task-2

- 1. Recursion to print Fibonacci series up to 20.
- 2. C program to count 1s in a number (get input from user)...
- 3. Program to print all uppercase alphabets from 'A' to 'Z' using recursion.
- 4. Reverse a numbers using a recursion

Add three values without using addition operator(+)