

# 1

## HOMEWORK SET

- a. Write a program to calculate perimeter of rectangle. Take sides, a & b, from the user.
- b. Take a number(n) from user & output its cube( $n*n*n$ ).
- c. Write comments for programs a & b.

# 2

## HOMEWORK SET

- a. Write a program to print the average of 3 numbers.
- b. Write a program to check if given character is digit or not.
- c. Write a program to print the smallest number of two.

# 3

## HOMEWORK SET

a. Write a program to check if a given number is Armstrong number or not.

(Search what is Armstrong number)

b. Write a program to check if the given number is a natural number.

(Natural numbers start from 1)

# 4

## HOMEWORK SET

a. Search on what a "nested loop" is & print this pattern using it.



```
* * * * *  
* * * * *  
* * * * *  
* * * * *
```

b. Write a program to check if a number is prime or not.

c. Write a program to print prime numbers in a range.

# 5

## HOMEWORK SET

- a. Write a function to find sum of digits of a number.
- b. Write a function to find square root of a number.
- c. Write a function to print "Hot" or "Cold" depending on the temperature user enters.
- d. Make your own pow function.

# 6

## HOMEWORK SET

- a. Write a program in C to find the maximum number between two numbers using a pointer.
- b. Write a program in C to print the elements of an array in reverse order.
- c. Write a program in C to print all the letters in english alphabet using a pointer.

# 7

## HOMEWORK SET

- a. In an array of numbers, find how many times does a number 'x' occurs.
- b. Write a program to print the largest number in an array.
- c. Write a program to insert an element at the end of an array.

# 8

## HOMEWORK SET

- a. Write a program to convert all lowercase vowels to uppercase in a string.
- b. Write a program to print the highest frequency character in a string.
- c. Write a program to remove blank spaces in a string.
- d. Write a program to replace lowercase letters with uppercase & vice versa in a string.



## HOMework SET

Make a system that can store information of all students, teachers & staff of your college in the form of structures.

You can also make this into a C Project with other functionalities like cgpa calculation of students, storing attendance etc.

# 10

## HOMEWORK SET

- a. Write a program to read a string from a file & output to the user.
- a. Replace the data in file of Q(a) with the number of vowels in the string.
- c. Format the information of 5 students (name, marks, cgpa, course) in a table like structure in a file.

# 11

## HOMEWORK SET

- a. Search about what is a 'dangling pointer' in C.
- b. Allocate memory for 500 integers using calloc & then store first 500 natural numbers in that space.
- c. Search about what is 'memory leak' in C.
- d. Search & find out which is better malloc() or calloc ().