

## C Programming Assignment Project

- Q. 1 Write algorithm for the following :
- a) to check whether an entered number is odd / even.
  - b) to calculate sum of three numbers.
- Q. 2 Draw a flowchart for the following :
- a) to find greater and smaller number from given two numbers.
  - b) to calculate sum of first 10 odd numbers.
- Q. 3 Write short notes on the following :
- a) C Variables    b) C data types
- Q. 4 Accept principal amount, rate of interest, and duration from the user. Display Interest Amount and Total Amount (Principal + Interest).
- Q. 5 Accept the salary of an employee from the user. Calculate the gross salary on the following basis:
- | <b>Basic</b>    | <b>HRA</b> | <b>DA</b> |
|-----------------|------------|-----------|
| 1 - 4000        | 10%        | 50%       |
| 4001 - 8000     | 20%        | 60%       |
| 8001 - 12000    | 25%        | 70%       |
| 12000 and above | 30%        | 80%       |
- Q. 6 Accept any number from the user. Display whether the number is divisible by 100 or not.
- Q. 7 Accept a month in digit from the user. Display the month in words. If number is not between 1 and 12 display message “Invalid Month”. (Use ‘switch’)
- Q. 8 Display all prime numbers between 50 and 150.

Q. 9 Write a program to print the following pattern:

a)	1	b)	1
	1 2		2 2
	1 2 3		3 3 3
	1 2 3 4		4 4 4 4
	1 2 3 4 5		5 5 5 5 5

Q. 10 Write a program to swap the values of two numbers. Do this using call by reference method of function.

Q. 11 Write a program to accept 10 values in an integer array. Display the number of odd, even, and negative numbers.

Q. 12 Accept any two strings from the user. Display whether both the strings are equal or not. (do not use standard functions.)

Q. 13 Accept any string from the user. Convert case of the string to lower / upper using pointers. (if entered string is in lower case convert it to uppercase and vice versa.)

Q. 14 Accept any two numbers from the user. Using pointers swap the values two numbers without using third variable.

Q. 15 Create a structure to store the employee number, name, department and basic salary. Create a array of structure to accept and display the values of 10 employees.

Q. 16 Accept a file name from the user. Display the contents of the file. Also add the entered string to the file.

Q. 17 a) Any number is a command line argument. Write a program to display the number in reverse order.

b) Write a short note on enum

**Programmes for 40 marks  
( For Practice Purpose Only )**

- Q. 1 Following is the menu to be displayed to the user. On selecting a choice display appropriate result. Number should be accepted from the user.

Menu

1. Prime Factors
  2. Leap Year
  3. Sum of all digits
  4. Number in reverse order
- Q. 2 Perform the following operations on integer array of 10 elements. Accept the values from user.
1. Sort an array in ascending order.
  2. Display sum of all odd values stored in an array.
  3. Display number of even values stored in an array.
- Q. 3 Write a program for the following
1. A file name is command line argument. Display the contents of the file where each word will be displayed on a new line. Display proper message if file does not exist.
  2. Display no. of ovals stored in the file.
  3. Display no. of “the” stored in the file.
  4. Copy contents of the file to another file.