

## Assignment- part-1(Using control,looping and switch)

1. Write a C program to find maximum between three numbers.
2. Write a C program to check whether a number is negative, positive or zero.
3. Write a C program to check whether a number is divisible by 5 and 11 or not.
4. Write a C program to check whether a number is even or odd.
5. Write a C program to check whether a year is leap year or not.
6. Write a C program to input any alphabet and check whether it is vowel or consonant.
7. Write a C program to input any character and check whether it is alphabet, digit or special character.
8. Write a C program to input week number and print week day.
9. Write a C program to input month number and print number of days in that month.
10. Write a C program to input all sides

of a triangle and check whether triangle is valid or not.

11. Write a C program to check whether the triangle is equilateral, isosceles or scalene triangle.

12. Write a C program to find all roots of a quadratic equation.

13. Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer.

Calculate percentage and grade according to following:

Percentage  $\geq 90\%$  : Grade A

Percentage  $\geq 80\%$  : Grade B

Percentage  $\geq 70\%$  : Grade C

Percentage  $\geq 60\%$  : Grade D

Percentage  $\geq 40\%$  : Grade E

Percentage  $< 40\%$  : Grade F

14. Write a C program to input basic salary of an employee and calculate its Gross salary according to following:

Basic Salary  $\leq 10000$  : HRA = 20%, DA = 80%

Basic Salary  $\leq 20000$  : HRA = 25%, DA = 90%

Basic Salary > 20000 : HRA = 30%, DA = 95%

15. Write a C program to input electricity unit charges and calculate total electricity bill according to the given

condition:

For first 50 units Rs. 0.50/unit

For next 100 units Rs. 0.75/unit

For next 100 units Rs. 1.20/unit

For unit above 250 Rs. 1.50/unit

An additional surcharge of 20% is added to the bill

part-2 (Functions)

1. WAP to perform Arithmetic Operations on integers

2. WAP to find Calculate simple interest.

3. WAP to find Area & perimeter of rectangle.

4. WAP to Calculate exponentiation x to the power of y.

5. WAP to Calculate sum of series

6. WAP to find Check if number is perfect numbers between 1 to 50.

7. WAP to find Prime numbers from 1 to 100
8. WAP to Print Fibonacci series.
9. WAP to Print Sum of digits using recursion
10. WAP to Convert decimal to binary number.
11. WAP to find factorial of given number using recursion.

### part-3(Arrays)

1. Write a C program to read and print elements of array.
2. Write a C program to find sum of all array elements.
3. Write a C program to find maximum and minimum element in an array.
4. Write a C program to count total number of even and odd elements in an array.
5. Write a C program to count total number of

negative elements in an array.

6. Write a C program to copy all elements from an array to another array.

7. Write a C program to insert an element in an array.

8. Write a C program to delete an element from an array at specified position.

9. Write a C program to count frequency of each element in an array.

Write a C program to find reverse of an array.

10. Write a C program to put even and odd elements of array in two separate array.

11. Write a C program to sort array elements in ascending or descending order.

12. Write a C program to add two matrices.

13. Write a C program to multiply two matrices.

14. Write a C program to check Identity

matrix.

part-4(Pointers)

Unit-03(Pointers  
assignment)

1.Program to create, initialize, assign  
and access

a pointer variable.

2.Program to swap two numbers using  
pointers.

3.Program to change the value of constant  
integer

using pointers.

4.Program to print a string using  
pointer.

5.Program to count vowels and consonants  
in a

string using pointer.

6.Program to read array elements and  
print with

addresses.

7.Program to demonstrate example of  
double pointer

(pointer to pointer).

8. Program to demonstrate example of array of pointers.
9. Making a valid pointer as NULL pointer in C.
10. Modify value stored in other variable using pointer in C.

#### part-5(Strings)

1. Write a C program to find length of a string.
2. Write a C program to copy one string to another string.
3. Write a C program to concatenate two strings.
4. Write a C program to compare two strings.
5. Write a C program to convert lowercase & uppercase in string.
6. Write a C program to convert uppercase string to lowercase.
7. Write a C program to find total number of alphabets, digits or special character in a string.

8. Write a C program to count total number of words in a string.
9. Write a C program to find reverse of a string.
10. Write a C program to check whether a string is palindrome or not.
11. Write a C program to search all occurrences of a character in given string.
12. Write a C program to count occurrences of a character in given string.
13. Write a C program to count frequency of each character in a string.
14. Write a C program to remove all repeated characters from a given string.
15. Write a C program to trim leading white space characters from given string.
16. Write a C program to trim trailing white space characters from given string.
17. Write a C program to remove all extra blank spaces from given string.
- C program to find second largest