

LAB ASSIGNMENT

1.
 - a). Write a C program display your personal detail.
 - b). Write a C program addition of given two numbers.
 - c). Write a C program find out the simple Interest given principal, rate and time.
 - d). To implement calculated perimeter and area of given positive radius of circle.
 - e). To implement given number is "Even" or "Odd".

2.
 - a). Write a C program accept **three digit** number find out sum of digit. $123=6$
 - b). Write a C program accept **three digit** number find out reverse number. $123=321$
 - c). Write a C program given number is palindrome or not palindrome.
 - d). Write a C program given number is Armstrong or not Armstrong number.
 - e). To implement swapping 1. With third variable. 2. Without third variable.

3.
 - a). To implement given number is "Positive", "Negative" or "Equal to Zero".
 - b). To implement Celsius to Fahrenheit and Fahrenheit to Celsius. Menu driven
 - c). To implement maximum number given two number using ternary operator.
 - d). To implement accept five marks find out total and division.

If $\text{per} \geq 60$ then print "1st Division"
 If $\text{per} \geq 45$ then print "2nd Division"
 If $\text{per} \geq 33$ then print "3rd Division"
 Other wise "Fail"
 - e). To implement accept three number displays in ascending order.

4.
 - a). Write a C program to calculate and print the roots of quadratic equation ax^2+bx+c . Print there Roots if $D > 0$ then "Roots are Real and Distinct" if $D = 0$ then "Roots are Real and Equal" and $D < 0$ then "Roots are Complex".
 - b). To implement given character is lower character or upper character or digit.

ASCII Chart Total 0 TO 255 keyboard character

65=A to 90=Z	Total 26	97=a to 122=z	Total 26	48=0 to 57=9	Total 10
Capital Letter		Small letter		Digit	

- c). To implement print first N-Fibonacci numbers (ex- 0 1 1 2 3 5 8 13).
- d). To implement accepts any year find given year is leap year or not a leap year.
- e). To implement these pattern

<pre> * *** ***** ***** ***** </pre>	<pre> 1 12 123 1234 12345 </pre>	<pre> ABCDE ABCD ABC AB A </pre>
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- 5
 - a) To implement accept any positive number find out factorial using for loop
 - b) To implement reverse number using while loop Such as 123=321.
 - c) To implement Sum of Digit using do-while loop Such as $123=1+2+3=6$.
 - d) To given N number implement sum of N number and maximum number.
 - e) Write a C program accept any number find out given number is prime or not

- 6
 - a). Write a C program generate all prime number 1 to 100
 - b). Write a C program generate all Armstrong number 1 to 500
 - c). Write a C program generate all palindrome number 200 to 500
 - d). To implement sum of series $!1 + !2 + !3 + !4 + \dots + N$ terms.
 - e) To implement sum of series

$$\text{Sum} = X - X^3/!3 + X^5/!5 - X^7/!7 + \dots + N \text{ terms}$$

- 7
 - a) To implement accept any positive number find out factorial using function
 - b) To implement accept two number find out power Ex. $2^3 = 8$. Own function.
 - c) To implement accept any number find out the factorial using recursion.
 - d) To implement call by value and call by reference
 - e) To implement accept two number find power using recursion.

- 8
 - a). Write a C program to insert 10 integer numbers in an Array. Print the element of array in ascending order using pointer method.
 - b). Write a C Program to read in 10 integer number and print there average, there sum, Minimum and Maximum numbers.
 - c) To implement convert Decimal to Binary and binary to decimal.
 - d) To implement Linear and Binary Search program.
 - e). Write a C program to multiply two matrices $C = A*B$. Take the size and element of matrices through keyboard and element of matrices not less then zero or negative. Where B is transpose of A.

- 9
 - a) To implement reverse a string using pointer method.
 - b) To implement sort name of the given list of names
 - c) To implement in any string how many vowels, how many white space (blank space), how many constant, how many upper character and lower character.
 - d) To implement given string is "palindrome" or "not palindrome".
 - e) To implement own strlen(), strcpy(), strcat(), strrev() function.

- 10
 - a). Declare a structure which contains the following member and write a program in C to list all students who scored more then 75 marks.
 Roll No, name, age, marks.
 - b). To implement display these name with the Command Line Argument
 - c) To implement copy the content of given file say "a.txt" to another file "b.txt".
 - d). Write a C program accept an N number and write into a file "number.txt". Using the file "number.txt", store different file "even.txt" and "odd.txt".