

1	<b>OPERATORS AND EVALUATION OF EXPRESSIONS</b> 1. Write a program that works as a calculator (addition, multiplication, division, subtraction). 2. Write a program to find area of triangle( $a=h*b*.5$ ) a = area, h=height, b=base 3. Write a program to calculate simple interest ( $i = (p*r*n)/100$ ) Simple interest where p = Principal amount r = Rate of interest n = Number of years 4. Write a C program to interchange two numbers with and without using third variable. 5. Write a program to display the size of every data type using "sizeof" operator. 6. Write a C program to enter a distance in to kilometer and convert it in to meter, feet, inches and centimeter 7. Write a program to compute Fahrenheit from centigrade ( $f=1.8*c +32$ ) 8. Write a program to illustrate the use of unary prefix and postfix increment and decrement operators.	YES										
2	<b>Decision Making</b> 1. Write a C program to find that the accepted number is Negative or Positive or Zero. 2. Write a program to read marks of a student from keyboard whether the student is pass or fail( using if else) 3. Write a program to read three numbers from the keyboard and find out the maximum out of these three. (Nested if else).Write a C program to check whether the entered character is capital, small letter, digit or any special character. 4. Write a program to read marks from keyboard and your program should display equivalent grade according to following table(if else ladder) <table><tr><td>Marks</td><td>Grade</td></tr><tr><td>100 - 80</td><td>Distinction</td></tr><tr><td>79 - 60</td><td>First Class</td></tr><tr><td>59 - 40</td><td>Second Class</td></tr><tr><td>&lt; 40</td><td>Fail</td></tr></table> 5. Write a C program to prepare payslips using the following data. Da = 10% of basic, Hra = 7.50% of basic, Ma = 300, Pf = 12.50% of basic, Gross = basic + Da + Hra + Ma, Nt = Gross – Pf. 6. Write a C program to read no 1 to 7 and print relatively day Sunday to Saturday. 7. Write a C program to find out the Maximum and Minimum number from given 10 numbers 8. Write a C program to input an integer number and check if the last digit of the number is even or odd.	Marks	Grade	100 - 80	Distinction	79 - 60	First Class	59 - 40	Second Class	< 40	Fail	YES
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100 - 80	Distinction											
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59 - 40	Second Class											
< 40	Fail											

3	<p><b>Looping</b></p> <ol style="list-style-type: none"> <li>1. Write a C program to find the factorial of a given number.</li> <li>2. Write a program to reverse a number.</li> <li>3. Write a program to generate first <math>n</math> number of Fibonacci series</li> <li>4. Write a program to find out the sum of the first and last digit of a given number.</li> <li>5. Write a C program to find the sum and average of different numbers which are accepted by user as many as user wants</li> <li>6. Write a program to check whether the given number is prime or not</li> <li>7. Write a program to evaluate the series <math>1^2+2^2+3^2+\dots+n^2</math></li> <li>8. Write a C program to find <math>1+1/2+1/3+1/4+1/n</math>.</li> <li>9. Write a program to print following patterns :           <pre>           *           *           *****           **          * *          ****           ***         * * *         ***           ****        * * * *        **           *****     * * * * *       *           </pre> </li> <li>10. Write a program to print following patterns :           <pre>           1           12345       55555       1           12          1234        4444        22           123         123         333         333           1234        12          22          4444           12345       1           1           55555           </pre> </li> </ol>	YES
4	<p><b>Arrays &amp; Strings</b></p> <ol style="list-style-type: none"> <li>1. Write a C program to read and store the roll no and marks of 20 students using an array.</li> <li>2. Write a program to find out which number is even or odd from list of 10 numbers using array</li> <li>3. Write a program to find the maximum element from a one-Dimensional array.</li> <li>4. Write a Program to Search an element in array.</li> <li>5. Write a Program to perform addition of all elements in Array.</li> <li>6. Write a Program to reverse the array elements in C Programming.</li> <li>7. Write a Program for deletion of an element from the specified location from Array.</li> <li>8. Write a program to find a character from a given string.</li> <li>9. Write a program to replace a character in a given string.</li> <li>10. Write a program to delete a character in a given string.</li> <li>11. Write a program to reverse string.</li> <li>12. Write a program to convert string into upper case</li> </ol>	YES

5	<b>Functions</b> <ol style="list-style-type: none"> <li>1. Write a program that defines a function to add first <math>n</math> numbers.</li> <li>2. Write a function in the program to return 1 if number is prime otherwise return 0</li> <li>3. Write a function Exchange to interchange the values of two variables, say x and y illustrates the use of this function in a calling function.</li> <li>4. Write a C program to check whether a number is prime, Armstrong or perfect number using functions.</li> <li>5. Write a program to find the factorial of a number using recursion.</li> <li>6. Write a program to calculate sum of first 20 natural numbers using recursive function.</li> <li>7. Write a program to generate Fibonacci series using recursive function.</li> <li>8. Write a program to find sum of digits of the number using Recursive Function.</li> <li>9. Write a function that will scan a character string passed as an argument and convert all lowercase character into their uppercase equivalents</li> </ol>	YES	-	-
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an argument and convert all lowercase character into their uppercase equivalents

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## **Pointers**

1. Write a program to print the address of a variable using a pointer.
2. Write a C program to swap the two values using pointers.
3. Write a C program to print the address of a character and the character of string using a pointer.
4. Write a program to add two numbers using pointers.
5. Write a program to input and print array elements using pointer.
6. Write a program to copy one array to another using pointer.
7. Write a program to swap two arrays using pointers.
8. Write a program to access elements using a pointer.
9. Write a program for sorting using a pointer.

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## **Structures**

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## Structures

1. Write a program to read structure elements from the keyboard.
2. Design a structure student\_record to contain name, branch and total marks obtained. Develop a program to read data for 10 students in a class and print them.
3. Write a program to add two distances in feet and inches using structure
4. Write a program to read and print an Employee's Details using Structure.
5. Write a program to declare, initialize an UNION.

8	<p><b>File Handling in C</b></p> <ol style="list-style-type: none"> <li>1. Write a program to write a string in file</li> <li>2. A file named data contains a series of integer numbers. Write a c program to read all numbers from a file and then write all odd numbers into a file named “odd” and write all even numbers into a file named “even”. Display all the contents of these file on screen</li> <li>3. C Program to count number of lines in a file</li> <li>4. C Program to print contents of file</li> <li>5. C Program to copy contents of one file to another file</li> <li>6. C Program to merge contents of two files into a third file</li> </ol>
9	<p><b>Graphics Functions :</b></p> <ol style="list-style-type: none"> <li>1. Write a Program to draw a point, arc, line, and circle.</li> <li>2. Write a Program to draw a rectangles and polygons.</li> <li>3. Write a Program to fill polygons.</li> </ol>
10	<p><b>OEP</b></p>