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| **Name:** | **SRN:** | **Section:** |
| **Date:** | **Week Number:** |

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| **1** | **1) Write a C program to generate Pascal triangle using two dimensional array**  **Input:**  Enter the n value:  4  **Output:**  1  1 1  1 2 1  1 3 3 1 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **2** | Write a C program to read elements in a matrix and check whether the given matrix is symmetric matrix or not.  **Input:**  Enter the value of m  3  Enter the value of n  3  Enter elements in matrix of size 3x3:  1  0  0  0  1  0  0  0  1  **Output:**  The given matrix is Symmetric matrix:  1 0 0  0 1 0  0 0 1 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **3** | Write a C program to compare 2 dates and print appropriate message using structures  **Input1:**  Enter Date1 in the format dd/mm/yyyy  12/2/2000  Enter Date2 in the format dd/mm/yyyy  12/2/2000  Date1=12/2/2000  Date2=12/2/2000  **Output1:**  Date1 is equal to Date2  Input2:  Enter Date1 in the format dd/mm/yyyy  12/3/2000  Enter Date2 in the format dd/mm/yyyy  12/3/2001  Date1=12/3/2000  Date2=12/3/2001  **Output2:**  Date1 is smaller than Date2  **Input3:**  Enter Date1 in the format dd/mm/yyyy  12/4/1999  Enter Date2 in the format dd/mm/yyyy  12/2/1999  Date1=12/4/1999  Date2=12/2/1999  **Output3:**  Date1 is greater than Date2 |
|  | **Program:** |
|  | **Output Screenshot:** |
| 4 | Write a C Program to Add and subtract two Complex Numbers by Passing Structure to a Function  **Input:**  For 1st complex number  Enter the real and imaginary parts: 5  4  For 2nd complex number  Enter the real and imaginary parts: 3  2  **Output:**  Sum = 8.0 + 6.0i  Sub = 2.0 - 2.0i |
|  | Program: |
|  | Output Screenshot: |
| 1 | **Practice Programs**  Write a program that fills a five-by-five matrix as follows:  Upper left triangle with +1s  Lower right triangle with -1s  Right to left diagonal with zeros  Display the contents of the matrix using not more than two printf statements  **Output:**  This is 5x5 Matrix  1 1 1 1 0  1 1 1 0 -1  1 1 0 -1 -1  1 0 -1 -1 -1  0 -1 -1 -1 -1 |
|  | Program: |
|  | Output Screenshot: |
| 2 | Write a Program to add two distances in the inch-feet system using structures  **Input:**  Enter 1st distance  Enter feet: 23  Enter inch: 10  Enter 2nd distance  Enter feet: 34  Enter inch: 2.4  **Output:**  Sum of distances = 58'-0.4" |
|  | Program: |
|  | Output Screenshot: |