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| **Date: 29-05-2021** | **Week Number: 4** |

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| **1** | Write a function to display an array elements in the reverse order using multiple files.  a) using index  b) using pointer  **Input:**  Enter the size of an array  5  Enter elements  11  22  33  44  55  **Output:**  Array elements:  11 22 33 44 55  Reversed array:  55 44 33 22 11 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **2** | Write a function for factorial using recursion and use it to find C(n, r) using multiple files.  **Input:**  5 2  **Output:**  ncr is: 10 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **3** | Write a C program to print all unique elements of an array using Make file  **Input:**  Input the number of elements to be stored in the array: 5  Input 5 elements in the array :  element - 0 : 1  element - 1 : 2  element - 2 : 1  element - 3 : 3  element - 4 : 3  **Output:**  The unique elements found in the array are:  List of Unique Array Elements in this Array are : 2 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **4** | Write a C program to Calculate the power of any number using recursion and multiple files  **Input:**  Recursion : Calculate the power of any number :  Input the base value : 4  Input the value of power : 2  **Output:**  The value of 4 to the power of 2 is : 16 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **5** | Write a function to check whether a given number is prime and use that to find the next prime number, greater than a given number.  **Input1:**  Enter a number  4  **Output1:**  Next prime number=5  **Input2:**  Enter a number  113  **Ouput2:**  Next prime number=127 |
|  | **Program:** |
|  | **Output Screenshot:** |
| **1** | **Practice Programs**  Write a program in C to find the maximum and minimum element in an array  **Input:**  Find maximum and minimum element in an array :  Input the number of elements to be stored in the array :5  Input 5 elements in the array :  element - 0 : 12  element - 1 : 10  element - 2 : 6  element - 3 : 7  element - 4 : 56  **Output:**  Maximum element is : 56  Minimum element is : 6 |
|  | **Program:** |
|  | **Output Screenshot:** |
| 2 | Write a function to populate an array with fibonacci numbers using make files  **Input:**  Enter how many Fibonacci numbers you want populate:  5  **Output:**  Fibonacci number are:  0  1  1  2  3 |
|  | **Program:** |
|  | **Output Screenshot:** |