**Indore Institute of Science & Technology**

**Department of Computer Science & Allied Department**

**LIST OF Programs**

**Week -1**

**Algolution**

1. Write a program to count total number of negative numbers in an array.
2. Write a program that takes 5 integers as input from the user and print Max of all the numbers.
3. Write a program to merge two sorted arrays to a third array.
4. Write a program that takes 7 integers as input from the user   
   then Reverse the order of numbers in the array, then print the numbers.
5. Write a program that takes 5 integers as input from the user   
   and finds out if the order of numbers in array is palindrome  
   e.g.   
   if input numbers are 44 56 56 44 then the array is in palindrome order  
   if input numbers are 44 53 156 44 then the array is not in palindrome order.
6. Write a program to search a number (taken as input from user) in an array   
   then print the index of the first occurrence of the input number in the array  
   If the input number is not present in the array then print -1
7. Write a program to print all unique numbers in an array.
8. Write a program to count frequency of each number in an array.
9. Write a program to count total number of duplicate numbers in an array.
10. write a function in C to print following pattern  
      
    Note: Number of rows and columns shall be the input parameters to the function  
      
    Parallelogram   
      
     \*\*\*\*\*  
     \*\*\*\*\*  
     \*\*\*\*\*  
     \*\*\*\*\*  
    \*\*\*\*\*
11. write a function in C to print following pattern  
      
    Note: Only number of rows shall be the input parameter to the function  
      
    Right triangle  
      
    \*  
    \*\*  
    \*\*\*  
    \*\*\*\*  
    \*\*\*\*\*
12. write a function in C to print following pattern  
      
    Note: Only number of columns will be the input parameter to the function  
      
    Half diamond  
      
    \*  
    \*\*  
    \*\*\*  
    \*\*\*\*  
    \*\*\*\*\*  
    \*\*\*\*  
    \*\*\*  
    \*\*  
    \*
13. write a function in C to print following pattern  
      
    Note: Only odd number of rows will be the input parameter to the function. If the number of rows is even then print an error and return false else return true.  
      
    Diamond  
      
     \*  
     \*\*\*  
     \*\*\*\*\*  
     \*\*\*\*\*\*\*  
    \*\*\*\*\*\*\*\*\*  
     \*\*\*\*\*\*\*  
     \*\*\*\*\*  
     \*\*\*  
     \*
14. write a function in C to print following pattern   
      
    Note: Number of rows and columns shall be the input parameters to the function  
      
    12345  
    54321  
    12345  
    54321  
    12345
15. write a function in C to print following pattern   
      
    Note: Number of rows and columns shall be the input parameters to the function  
      
    11111  
    10001  
    10001  
    10001  
    11111
16. write a function in C to print following pattern   
      
    Note: number of rows shall be the input parameter to the function.  
      
    12345  
    23455  
    34555  
    45555  
    55555

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