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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