

## Program for Practice

- 1) Write a program to accept the three sides of a triangle and find whether the triangle is a right angle triangle or not ( Use Pythagoras Theorem).
- 2) Write a program to generate all the integers in the range of 'm' and 'n' divisible by 'd'. ( m, n, d are inputs from user).
- 3) Write a program to find sum of sequence  
1-1/2+1/3-1/4.....
- 4) Write a program to print multiplication table of a number using a FUNCTION.
- 5) Given month and year, write a program to find the number of days in the month in the given year using function.  
Example:   Input           Month=4   Year=2000  
              Output:       Days=30  
  
              Input        Month=2   Year=2000  
              Output:       Days=28  
  
              Input        Month=12   Year=1995  
              Output:       Days=31
- 6) Write a program to calculate  $Ncr = n! / n! * (n-r)!$ . Use a separate function which will return factorial of a given number.
- 7) Write a program to find union of two arrays a and b with size m and n respectively.  
e.g.   int a[]={1,2,3,4,5};  
       int b[]={1,4,6};  
  
       Result c array:   c[]={1,2,3,4,5,6};
- 8) Write a program to find whether a matrix is an identity matrix or not.
- 9) Write a program to sort a matrix row wise (for n\*n matrix, n>=5, You can use any sorting algorithm)
- 10) Write a program to find saddle points in a matrix.  
( A saddle point is one which is the least element in the row and is the largest element in the column.)
- 11) Write a program to simulate strcmpi().  
      strcmpi function ignores the case of the letters while comparing. e.g. the string "ABC" and "abc" are treated to be equal.
- 12) Accept dates in dd-mm-yyyy format into string variables and perform the following
  - i) Validate the given date
  - ii) Find the difference between two dates
  - iii) Find whether date d1 is earlier than or later than or equal to date d2