

Algorithm :

- Take input from the user for the size of double dimension array(n).
- Define a integer array `arr[n][n]` and take input from console for the elements of the array `arr[n][n]`.
- Calculate the minimum number of zeros that should be present in any triangular matrix of order “n” by the formula $n(n-1)/2$ and store it in any variable(number)
- Define a switch case with 2 cases for checking upper triangularity and lower triangularity
- For checking upper triangularity set conditions to check `arr[i][j]!=0,for all (i=j)` and `arr[i][j]=0,for all (i>j)` and set a flag variable(`f=1`) and counter (`c++`)variable respectively.
- For checking lower triangularity set conditions to check `arr[i][j]!=0,for all (i=j)` and `arr[i][j]=0,for all (i<j)` and set a flag variable(`f=1`) and counter (`c++`)variable respectively.
- If the value of counter variable (`c`)=number and `f!=1` then the given matrix is triangular else print the matrix is not triangular.