ALGORITHM

• Step-1 :- START  
• Step-2 :- Create a class named as rearrange.

• Step-3 :- Create a method named as sortNonBoundaryMatrix passing an array and an integer as parameters.

In this function, sort the non-boundary elements of the matrix in ascending order by first converting the 2D array into 1D array and then sorting it and then again transferring in to 2D array.

• Step-4 :- Create a method named as computePrintDiagonalSum passing an array and an integer as parameters. In this function, compute the sum of the diagonal elements of the matrix and print the final sum.

• Step-5 :- Create a method named as printMatrix passing an array and an integer as parameters. In this function, print the matrix.

• Step-6 :- Create a method named as main. In this function, input the size of the matrix and the elements of the matrix from the user using the Scanner class. Then, call the sortNonBoundaryMatrix function and then the computePrintDiagonalSum function and finally call the printMatrix function.

• Step-7 :- END

VD TABLE

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Variable | Data Type | Description |
| 1 | m | int | To store the size of the  matrix  Array to store the elements of the matrix  Loop variable  Loop variable  Temporary variable to  store the elements of the matrix  To store the sum of the  diagonal elements of the matrix  Temporary Variable  Array to store the elements of the matrix (1D Format) |
| 2 | a | int[][] |
| 3  4  5 | i  j  t | int  int  int |
| 6 | sum | int |
| 7  8 | k  b | int  int[] |

OUTPUT

