

## 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 it 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
2	a	int[][]	Array to store the elements of the matrix
3	i	int	Loop variable
4	j	int	Loop variable
5	t	int	Temporary variable to store the elements of the matrix
6	sum	int	To store the sum of the diagonal elements of the matrix
7	k	int	Temporary Variable
8	b	int[]	Array to store the elements of the matrix (1D Format)

# OUTPUT

```
BlueJ: Terminal Window - basic
Options
ENTER MATRIX SIZE (M): 4
ENTER ELEMENTS OF MATRIX
ENTER ROW 1:
9 2 1 5
ENTER ROW 2:
8 13 8 4
ENTER ROW 3:
15 6 3 11
ENTER ROW 4:
7 12 23 8
ORIGINAL MATRIX
9      2      1      5
8      13     8      4
15     6      3     11
7      12     23     8
REARRANGED MATRIX
9      2      1      5
8      3      6      4
15     8     13     11
7      12     23     8
DIAGONAL ELEMENTS
9              5
      3      6
      8     13
7              8
SUM OF THE DIAGONAL ELEMENTS = 59
```