MODULE 15.5 PRACTICE DAY

1. WAP that will take n integers into a sqrt(n) by sqrt(n) array (2D) and show them as traditional matrix view.

Sample input	**Sample output**
9 9 8 7 6 5 4 3 2 1	9 8 7 6 5 4 3 2 1
9 1 1 1 2 2 2 3 3 3	1 1 1 2 2 2 3 3 3

2. WAP that will take inputs of two *3 x 3* sized matrix into two 2D array, suppose A and B. Now do C = A * B (multiplication). Finally display all the elements from matrix / 2D array C.

Sample input	**Sample output**
1 2 3 4 5 6 7 8 9 2 2 2 2 2 2 1 1 1	9 9 9 24 24 24 39 39 39

3. WAP that will take inputs of *m x n* sized matrix into a 2D array and find the maximum element with index location from that matrix.

Sample input	**Sample output**
3 3 1 2 3 4 5 6 2 9 2	Max: 9 Location: [2][1]

2 3 9 8 7 3 4 5	Max: 9 Location: [0][0]

4. WAP that will take (n x n) integer inputs into a square matrix of dimension n (where n must be an odd number). Then calculate sum of the integers at first row, last row and two diagonals without overlap. Please see the sample input-output.

Sample input	**Sample output**
5 1 2 3 4 5 2 3 4 1 6 3 4 9 6 7 4 2 6 7 8 5 4 3 2 1	52
7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	23

5. WAP that will take (n x n) integer inputs into a square matrix of dimension n (where n must be an odd number). Then calculate the sum of the integers based on the following position pattern (consider only the boxed position during the sum). Please see the input-output.

Sample input	**Sample output**
5 1 2 3 4 5 2 3 4 1 6 3 4 9 6 7 4 2 6 7 8 5 4 3 2 1	65
7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33