Career Advisory & Augmentation School KIIT Deemed to be University, Bhubaneswar

Coding Assignment-4

Q1. Program to print the elements of a 2d array in the form of a matrix in spiral form.

Input: 1 2 3 4
5 6 7 8
9 10 11 12

Output: 1 2 3 4 8 12 16 15 14 13 9 5 6 7 11 10

Q2. Program to find the saddle point coordinates in a given matrix. A saddle point is an element of the matrix, which is the minimum element in its row and the maximum in its column.

Input: Matrix[3][3] - 1 2 3
4 5 6
7 8 9

Output: 7

Q3. Program to rotate a matrix by 90 degrees clockwise.

Input: Matrix[3][3] 1 2 3
4 5 6
7 8 9
Output: 7 4 1
8 5 2
9 6 3

Q4. Program to print the sum of elements in the Zigzag sequence in a given matrix.

Input: Matrix[3][3] 1 2 3 4 5 6 7 8 9

Output: 1+2+3+5+7+8+9=35

Q5. Given a matrix, the task is to print the boundary elements of the matrix and display their sum.

Input: Matrix[3][3] 1 2 3

4 5 6

7 8 9

Output: 1 2 3

4 6

7 8 9

Sum = 1 + 2 + 3 + 6 + 9 + 8 + 7 + 4 = 40