C++ Assignments | 2D Arrays - 2 | Week 6

1. Write a program to print the elements of both the diagonals in a square matrix.

Input 1:

1 2 3

4 5 6

7 8 9

Output 1:

1   3

  5

7   9

2. Write a program to rotate the matrix by 90 degrees anti-clockwise.

Input 1:

1 2 3

4 5 6

7 8 9

Output 1:

3 6 9

2 5 8

1 4 7

3. Write a program to print the matrix in wave form.

Input :

1 2 3

4 5 6

7 8 9

Output : 7 4 1 2 5 8 9 6 3

4. Given a positive integer n, generate a n x n matrix filled with elements from 1 to n2 in spiral order.

Input 1: n = 3

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

Input 2: n = 1

Output 2: [[1]]

Q5. Predict the output :

```cpp
int main(){
    int a[][2] = {{1,2},{3,4}};
    int i, j;
    for (i = 0; i < 2; i++)
        for (j = 0; j < 2; j++)
            cout << a[i][j];
    return 0;
}
```

Note:- Please try to invest time doing the assignments which are necessary to build a strong foundation. Do not directly Copy Paste using Google or ChatGPT. Please use your brain😀.