Problem 1: Given a matrix, your task is to rotate the matrix 90 degrees clockwise.

```python
def rotate_matrix(matrix):

    n = len(matrix)

    for i in range(n):

        for j in range(i, n):

            matrix[i][j], matrix[j][i] = matrix[j][i], matrix[i][j]


    for i in range(n):

        matrix[i] = matrix[i][::-1]


    return matrix


# Example 1
arr = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
print(rotate_matrix(arr))
print("Rotated Image")
for i in range(len(arr)):

    for j in range(len(arr[0])):

        print(arr[i][j], end=" ")

    print()
```

```python
12  # Example 1
13  arr = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
14  print(rotate_matrix(arr))
15  print("Rotated Image")
16  for i in range(len(arr)):
17      for j in range(len(arr[0])):
18          print(arr[i][j], end=" ")
19      print()
20
21
22
23
```

input

```
Rotated Image
7 4 1
8 5 2
9 6 3
```