

867. Transpose Matrix

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Notes

Solution

Approach 1: Copy Directly

Intuition and Algorithm

The transpose of a matrix A with dimensions $R \times C$ is a matrix ans with dimensions $C \times R$ for which $ans[c][r] = A[r][c]$.

Let's initialize a new matrix ans representing the answer. Then, we'll copy each entry of the matrix as appropriate.

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Complexity Analysis

- Time Complexity: $O(R * C)$, where R and C are the number of rows and columns in the given matrix A .
- Space Complexity: $O(R * C)$, the space used by the answer.

Analysis written by: @awice (<https://leetcode.com/awice>).

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(/vikrant3)

vikrant3 (/vikrant3) ★ 0 ⌚ 6 hours ago

```
return [[a[j] for a in A] for j in range(len(A[0]))]
```

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