```
#include <stdio.h>

#define N 3 // Size of the square matrix

void rotateMatrix(int matrix[N][N]) {
    // Transpose the matrix
    for (int i = 0; i < N; i++) {
        for (int j = i; j < N; j++) {
            int temp = matrix[i][j];
            matrix[i][j] = matrix[j][i];
            matrix[j][i] = temp;
        }
```

```
    }


    // Reverse each row
    for (int i = 0; i < N; i++) {
        for (int j = 0; j < N / 2; j++) {
            int temp = matrix[i][j];
            matrix[i][j] = matrix[i][N - j -
1];
            matrix[i][N - j - 1] = temp;
        }
    }
}
```

```
void printMatrix(int matrix[N][N])
{
    for (int i = 0; i < N; i++) {
        for (int j = 0; j < N; j++) {
            printf("%d ", matrix[i][j]);
        }
        printf("\n");
    }
}

int main() {
    int matrix[N][N] = {
        {1, 2, 3},
        {4, 5, 6},
```

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        {7, 8, 9}
    };

    printf("Original Matrix:\n");
    printMatrix(matrix);

    rotateMatrix(matrix);

    printf("\nRotated Matrix (90 degrees clockwise):\n");
    printMatrix(matrix);

    return 0;
}
```