**package** Question13;

**public** **class** RotateMatrix {

**static** **void** reverseColumns(**int** arr[][])

{

**for** (**int** i = 0; i < arr[0].length; i++)

**for** (**int** j = 0, k = arr[0].length - 1;

j < k; j++, k--)

{

**int** temp = arr[j][i];

arr[j][i] = arr[k][i];

arr[k][i] = temp;

}

}

**static** **void** transpose(**int** arr[][])

{

**for** (**int** i = 0; i < arr.length; i++)

**for** (**int** j = i; j < arr[0].length; j++)

{

**int** temp = arr[j][i];

arr[j][i] = arr[i][j];

arr[i][j] = temp;

}

}

**static** **void** printMatrix(**int** arr[][])

{

**for** (**int** i = 0; i < arr.length; i++)

{

**for** (**int** j = 0; j < arr[0].length; j++)

System.***out***.print(arr[i][j] + " ");

System.***out***.println("");

}

}

**static** **void** rotate90(**int** arr[][])

{

*transpose*(arr);

*reverseColumns*(arr);

}

**public** **static** **void** main(String[] args)

{

**int** arr[][] = {{1, 2, 3, 4},

{5, 6, 7, 8},

{9, 10, 11, 12},

{13, 14, 15, 16}};

*rotate90*(arr);

*printMatrix*(arr);

}

}