TRANSPOSE MATRIX

Code:

```
2   package com.mycompany.transposematrix;
3
4   public class TransposeMatrix {
5
6       public static void main(String[] args) {
7           int[][] matrix1={{1,2,3,4},{5,6,7,8},{9,10,11,12}};
8           int[][] matrix2=new int[4][3];
9           for(int i=0; i<3; i++){
10              for (int j=0; j<4; j++){
11                  System.out.print(matrix1[i][j]+"\t");
12              }
13              System.out.println();
14          }
15          matrix2=transpose(matrix1);
16          for(int i=0; i<4; i++){
17              for (int j=0; j<3; j++){
18                  System.out.print(matrix2[i][j]+"\t");
19              }
20              System.out.println();
21          }
22      }
23      static int[][] transpose(int[][] matrix){
24          int[][] trans=new int[4][3];
25          for(int i=0; i<4; i++){
26              for(int j=0; j<3; j++){
27                  trans[i][j]=matrix[j][i];
28              }
29          }
30          return trans;
31      }
32  }
```

Output:

```
1       2       3       4
5       6       7       8
9       10      11      12
1       5       9
2       6       10
3       7       11
4       8       12
```