Matrix is symmetric or not

**package** com.java.pgms;

**import** java.util.Scanner;

**public** **class** Sums {

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

Scanner s=**new** Scanner(System.*in*);

System.*out*.println("enter the number of rows:");

**int** rows=s.nextInt();

System.*out*.println("enter the number of columns:");

**int** cols=s.nextInt();

**int** matrix[][]=**new** **int**[rows][cols];

System.*out*.println("enter the elements");

**for**(**int** i=0; i<rows; i++)

**for**(**int** j=0; j<cols;j++)

matrix[i][j]=s.nextInt();

s.close();

System.*out*.println("printing the input matrix:");

**for**(**int** i=0;i<rows; i++) {

**for**(**int** j=0;j<cols; j++)

System.*out*.print(matrix[i][j]+"\t");

System.*out*.println();

}

**if**(rows!=cols)

System.*out*.println("the given matrix is not symmetric");

**else** {

**boolean** symmetric=**true**;

**for**(**int** i=0;i<rows;i++) {

**for**(**int** j=0;j<cols;j++) {

**if**(matrix[i][j]!=matrix[j][i]) {

symmetric=**false**;

**break**;

}

}

**if**(!symmetric)

**break**;

}

**if**(symmetric) {

System.*out*.println("the given matrix is symmetric");

} **else** {

System.*out*.println("the given matrix is not symmetric");

}

}

}

}