

```

1 import java.io.*;
2
3 public class question51
4 {
5     public static void main(String args[])
6     {
7         int matrix[][]={{1,1,-1},{1,2,0},{-1,0,5}};
8         int transpose[][]=new int[3][3];
9
10        // forming the transpose of the original matrix
11        for(int i=0;i<3;i++)
12        {
13            for(int j=0;j<3;j++)
14            {
15                transpose[j][i]=matrix[i][j];
16            }
17        }
18
19        //checking if the original matrix is symmetric
20        boolean flag=true; //assuming that the matrix is symmetric
21        for(int i=0;i<3;i++)
22        {
23            for(int j=0;j<3;j++)
24            {
25                if(transpose[i][j]!=matrix[i][j]) // checking for negative case
26                {
27                    flag=false;
28                    break; //break because if even one element is not the same then it
                           //isnt a symmetric matrix
29                }
30            }
31        }
32
33        if(flag==true)
34            System.out.println("It is symmetric");
35        else
36            System.out.println("It is not symmetric");
37
38    }
39 }

```