Sample input #1: This is the basic test case (It is the graph drawn in OriginalGraph.py)

```
13
24
1 2
1 3
1 4
2 1
2 5
2 6
2 7
3 1
3 8
3 9
3 10
4 1
4 11
4 12
4 13
5 2
6 2
7 2
8 3
9 3
10 3
11 4
12 4
13 4
```

Output: ”This graph is SIMILAR to the one I received by E-mail”

Sample input #2: This test case tests if the number of vertices and edges is correctly verified

```
4
4
1 2
2 3
3 4
4 1
```

Output: “This graph is DIFFERENT to the one I received by E-mail”

Sample input #3: This test case is similar to the first one but the edges are suffled

```
13
24
9 3
3 1
3 9
12 4
4 13
1 3
4 1
7 2
8 3
4 11
2 1
6 2
2 6
5 2
2 5
3 8
4 12
1 4
1 2
3 10
2 7
13 4
10 3
11 4
```

Output:”This graph is SIMILAR to the one I received by E-mail”

Sample input #4: This is a completely different graph

```
13
24
1 2
1 3
1 4
1 5
1 6
1 7
1 8
1 9
```

1 10
1 11
1 12
1 13
1 14
1 15
1 16
2 2
2 3
2 4
2 5
2 6
2 7
2 8
2 9
2 10

Output: “This graph is DIFFERENT to the one I received by E-mail”

Sample input #5: This is very similar to the “Original Graph”, the only difference is that the last leaf is connected to the root

13
24
1 2
1 3
1 4
2 1
2 5
2 6
2 7
3 1
3 8
3 9
3 10
4 1
4 11
4 12
4 13
5 2
6 2
7 2

8 3
9 3
10 3
11 4
12 4
13 1

Output: “This graph is DIFFERENT to the one I received by E-mail”