

Faulty Robot

A company manufactures robots. Few robots are programmed to tell the truth no matter what, whereas others are programmed to lie. So there are two communities in the factory, i.e. the Truth Community and the Lie Community.

You meet with three robots and ask one of them which community do you belong to? Robot 1 replies to something in binary that you don't understand. The Second robot says that Robot 1 belongs to Lie Community. The Third Robot says that the Second Robot is lying. Which community does the Third Robot belong to?

FOR SOLUTION SCROLL TO THE NEXT PAGE!!!!

Solution:

Let's assume Robot 1 belongs to the Truth Community. If so, he will not lie and tell he's from the truth community. In this case, Robot 2 is Lying, and Robot 3 is right about it. If Robot 1 belongs to the Lie Community, he will lie from Truth Community, which means Robot 2 is again lying, which makes Robot 3 again being right about it. Therefore Robot 3 is from the "TRUTH COMMUNITY".