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PROBLEM OF THE MONTH

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In a country consisting of 100 cities there are direct round flights between some pairs of cities. The total number of flights is 2021 and each flight is operated by one of n air companies. There are at least two cities such that one is not reachable from the other one by less than three flights. Given that for any two cities there is an air company connecting these cities (by direct or not direct flights) find the maximal possible value of n .