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PROBLEM OF THE MONTH

Term: June 2017

In a country consisting of 2017 cities there are two way flights between some pairs of cities so that any two cities are connected by a flight route (direct or consisting of several flights). Find the minimal possible value of k for which for any such flight arrangement one can declare k cities *special* so that from any city (special or not special) there is a direct flight to at least one special city.