

Bilkent University
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## Problem Of The Month

Term: February 2024

The country has 6543 cities and between any two of these cities exactly one of 15 air companies is running two way flights. Find the minimal value of $n$ such that for any arrangement of all flights one can choose $n$ air companies such that only by using of flights of these chosen $n$ companies starting from any city one can reach any other city.

