Q1. Write code for an open 4*4 Leontief model which reads the data from the file 'leontief_data.txt' and finds the production vector at equilibrium. The demand vector is [25000,10000,30000,50000].

Link to leontief_data.txt: (file also provided in the same folder)
leontief_data.txt

You should print the Leontief Matrix and the Production vector obtained.

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Q2. Find the ranks of 4 webpages using the power iteration method and damping factor = 0.85. .Assume the transfer matrix to be :

[[0,½,0,0],[⅓,0,0,½],[⅓,0,0,½],[⅓,½,1, 0]]

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Q3. **Connecting Cities:**

Flights between various European and American cities are as shown in the network below. Find the ranking of cities in terms of flight connectivity using the Page Rank algorithm.