

Problem D

Tourism

Time Limit: 1 second

There are N historical places and attractions in Vietnam, each place has a unique ID from 1 to N . Tranquility Tourist Corporation is preparing a package tour for foreigners to visit Vietnam, starting from place s to place t ($1 \leq s, t \leq N$; $s \neq t$). Visitors will explore the beautiful scenes in all places in the trip from place s to place t .



To create a wide variation of choices for foreigners during their trip from place s to place t , the company provides different trip plans. Each trip plan starts from place s and ends at place t , and has the same total cost as the minimum cost to travel from s to t .

Two plans are considered different if at least one place in the travel route is not the same as in the other route.

Input

The first line contains three integer numbers N , s , and t , separated by spaces ($1 < N \leq 1000$; $1 \leq s, t \leq N$; $s \neq t$).

Each of the next N lines contains N integer numbers $C[i, j]$, the cost to travel directly from the i^{th} place to the j^{th} place.

Output

Print the number of different trip plans from s to t in module 10^9 .

Sample Input

Sample Output

| | |
|------------|---|
| 4 2 3 | 3 |
| 0 10 20 10 | |
| 10 0 30 20 | |
| 20 30 0 10 | |
| 10 20 10 0 | |