# MobiZone vs VinaGone

#### English

#### Tiếng Việt

KTuan and AnhDQ, CEOs of two telecommunication corporations MobiZone and VinaGone have signed a contract to use their network in common. N people have accepted to try this new service. The i<sup>th</sup> people accepts to pay  $M_i$  to use MobiZone's service or  $V_i$  to use VinaGone's one; and any two people i<sup>th</sup> and j<sup>th</sup> accept to pay  $C_{ij}$  in common whether they use different services (the network cost).

### Request

Find a way of choosing networks for N people satisfying the sum of total cost is minimum.

#### Input

- The first line contains number N.
- The second line contains N number(s)  $M_i$ .
- The third line contains N number(s) V<sub>i</sub>.
- The last N line(s), each of them contains N number(s)  $C_{ij}$  ( $C_{ij} = C_{ji}$ ).

## Output

- Contains the minimum total cost.

# Example

#### Input: 3

#### Output:

5

# Limitations

- N ≤ 250.
- The remaining numbers of Input do not exceed 1000.