Energy Distribution

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

There are n planets in the galaxy. Some undirected tunnels connect planets. There exists at most one tunnel connecting each pair of planets. So these tunnels can be described as an $n \times n$ matrix $W_{n\times n}$. Specifically, the tunnel connecting planet i and j has a width of $w_{i,j}$(If there is no tunnel between planet i and j, then $w_{i,j} = 0$).

Now, you want to distribute exactly 1.0 unit of energy among the n planets. Suppose that planet i is distributed e_i(a real number) unit of energy ($e_i \geq 0, \sum_{i=1}^{n} e_i = 1$), these planets will bring E magical value, where $E = \sum_{i=1}^{n} \sum_{j=i+1}^{n} e_i e_j w_{i,j}$.

Please distribute the energy and maximize the magical value.

Input

The first line contains an interger $n(1 \leq n \leq 10)$.

For the next n lines, each line contains n intergers. The j-th integer in the i-th line is $w_{i,j}(0 \leq w_{i,j} \leq 1000)$. Indicating the matrix $W_{n\times n}$.

Output

Output a real number as the answer. If your answer is A while the standard answer is B, your answer will be accepted if and only if $\frac{|A-B|}{\max(|A|,1)} \leq 10^{-6}$.

Examples

standard input	standard output
2 0 1 1 0	0.250000
3 0 2 1 2 0 2 1 2 0	0.571429