

```

1  #include <bits/stdc++.h>
2  using namespace std;
3
4  int n;
5  int M[19][19];
6  int A[19];
7  int dp[19][(1 << 19)];
8  int dead;
9  int solve(int current,int mask){
10
11     if(mask == dead)
12         return 0;
13
14     if(dp[current][mask]!=-1) return dp[current][mask];
15
16     int ans = 1e9+10;
17
18     for(int i=0;i<n;i++){
19         if(!(mask & A[i])){
20             ans = min(ans,solve(current+1,(mask | A[i]))+M[i][current]);
21         }
22     }
23     return dp[current][mask] = ans;
24 }
25
26 main(){
27     for(int i=0;i<=18;i++)
28         A[i] = 1 << i;
29     while(scanf("%d",&n) and n){
30         for(int i=0;i<n;i++)
31             for(int j=0;j<(1 << (n+1));j++)
32                 dp[i][j] = -1;
33         dead = (1 << n)-1;
34         for(int i=0;i<n;i++){
35             for(int j=0;j<n;j++){
36                 scanf("%d",&M[i][j]);
37             }
38         }
39         cout << solve(0,0) << endl;
40     }
41 }
42

```