#include <stdio.h>

#include <stdlib.h>

#define MAXN 20

int countAssignments(int n, int preferences[MAXN][MAXN]) {

int dp[1 << MAXN];

dp[0] = 1;

for (int mask = 1; mask < (1 << n); ++mask) {

dp[mask] = 0;

int student = \_\_builtin\_popcount(mask) - 1;

for (int topic = 0; topic < n; ++topic) {

if (mask & (1 << topic) && preferences[student][topic]) {

dp[mask] += dp[mask ^ (1 << topic)];

}

}

}

return dp[(1 << n) - 1];

}

int main() {

int n;

scanf("%d", &n);

int preferences[MAXN][MAXN];

for (int i = 0; i < n; ++i) {

for (int j = 0; j < n; ++j) {

scanf("%d", &preferences[i][j]);

}

}

int result = countAssignments(n, preferences);

printf("%d\n", result);

return 0;

}