/\*

PROG: cfair

LANG: C++

ID: hayk.sa1

\*/

#include <cstdio>

#include <algorithm>

using namespace std;

#define Max(a, b) ((a)>(b)?(a):(b))

struct booth

{

int p, i;

} p[410];

bool operator < (booth a, booth b)

{

return a.p < b.p;

}

int d[410];

int t[410][410];

int main()

{

freopen("cfair.in", "r", stdin);

freopen("cfair.out", "w", stdout);

int n, m, i, j;

scanf("%d", &n);

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

{

scanf("%d", &p[i].p);

p[i].i = i;

}

sort(p, p+n);

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

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

scanf("%d", t[i]+j);

m = 0;

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

{

d[i] = (p[i].p >= t[0][p[i].i]);

for (j = 0; j < i; j++)

if (p[j].p+t[p[j].i][p[i].i] <= p[i].p)

d[i] = Max(d[i], d[j]+1);

m = Max(m, d[i]);

}

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

return 0;

}