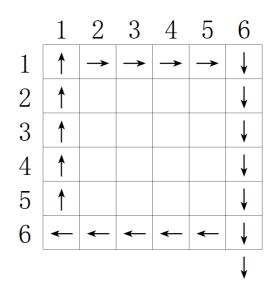
16	17	18	19	20	1
15	30	31	32	21	2
14	29	36	33	22	3
13	28	35	34	23	4
12	27	26	25	24	5
11	10	9	8	7	6

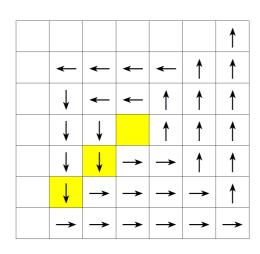


```
#include <iostream>
#include <iomanip>
using namespace std;
int m[105][105],n;
int main(){
    cin>>n;
    int x=1, y=n, t=1;
    m[x][y]=t;
    while(t<n*n){</pre>
         while(x+1 \le n\&m[x+1][y] == 0) m[++x][y] =++t;
         while(y-1>=1&&m[x][y-1]==0) m[x][--y]=++t;
         while (x-1)=1&&m[x-1][y]==0) m[--x][y]=++t;
         while(y+1 \le n\&m[x][y+1] == 0) m[x][++y] = ++t;
    }
// while(t<=n*n){</pre>
//
        //往下
//
        while(x <= n\&m[x][y] == 0) m[x++][y] = t++;
//
         x--;y--;
//
         //左
//
        while(y \ge 1\&m[x][y] == 0) m[x][y --] = t++;
//
        x--;y++;
//
         //上
//
        while(x \ge 1\&m[x][y] == 0) m[x--][y] = t++;
//
         x++;y++;
//
//
         while(y \le m[x][y] == 0) m[x][y++] = t++;
//
        x++;y--;
// }
```

```
for(int i=1;i<=n;i++){
    for(int j=1;j<=n;j++){
        cout<<setw(2)<<m[i][j]<<" ";
    }
    cout<<endl;
}
return 0;
}</pre>
```

题目二

1	2	3	4	5	6	7
43	42	41	40	39	38	37
44	21	20	19	18	17	36
45	22	7	6	5	16	35
46	23	8	1	4	15	34
47	24	9	2	3	14	33
48	25	10	11	12	13	32
49	26	27	28	29	30	31



```
#include <iostream>
#include <iomanip>
using namespace std;
int m[105][105],n;
int main(){
    cin>>n;
    int x=n/2+1, y=n/2+1, t=1, u=0;
    m[x][y]=t;
    while(t<n*n){</pre>
        x++;y--;u+=2;
         for(int i=1;i<=u;i++) m[x][++y]=++t;</pre>
         for(int i=1;i<=u;i++) m[--x][y]=++t;
         for(int i=1;i<=u;i++) m[x][--y]=++t;</pre>
        for(int i=1;i<=u;i++) m[++x][y]=++t;
    }
    for(int i=1;i<=n;i++){</pre>
         for(int j=1;j<=n;j++){</pre>
             cout<<setw(2)<<m[i][j]<<" ";</pre>
         }
         cout<<endl;</pre>
```

```
}
return 0;
}
```

铺地毯

```
#include <bits/stdc++.h>
using namespace std;
int n,tx,ty;
int m[5005][5005];
int a[10005],b[10005],g[10005],k[10005];
int main(){
    cin>>n;
    for(int i=1;i<=n;i++){</pre>
        cin>>a[i]>>b[i]>>g[i]>>k[i];
    }
    cin>>tx>>ty;
    \texttt{for(int i=1;i<=n;i++)} \{
        //a[i] b[i] g[i] k[i]
        for(int x=a[i];x<=a[i]+g[i];x++){
             for(int y=b[i];y<=b[i]+k[i];y++){</pre>
                 m[x][y]=i;
             }
        }
    }
    if(m[tx][ty]==0) cout<<-1;
    else cout<<m[tx][ty];</pre>
    return 0;
}
```