```c
#include <stdio.h>
#define MAX 100
int g[MAX][MAX], q[MAX], dist[MAX], v[MAX], n, m;
int bfs(int s, int e) {
    for(int i=1; i<=n; i++) dist[i]=-1;
    dist[s]=0; v[s]=1; q[0]=s;
    int f=0, r=1;
    while(f<r) {
        int u=q[f++];
        if(u==e) return dist[u];
        for(int i=1; i<=n; i++)
            if(g[u][i] && !v[i]) {
                v[i]=1; dist[i]=dist[u]+1; q[r++]=i;
            }
    }
    return -1;
}
int main() {
    int u,v,s,e;
    scanf("%d%d",&n,&m);
    for(int i=0;i<m;i++){
        scanf("%d%d",&u,&v);
        g[u][v]=g[v][u]=1;
    }
    scanf("%d%d",&s,&e);
    printf("%d\n",bfs(s,e));
    return 0;}
```

```
5 5
1 2
2 3
2 5
3 4
4 5
1 5
```

```
2
```