```cpp
#include <iostream>
#include<vector>
using namespace std;
const int N=10;
bool vis[N];
vector<int> g[N];
bool dfs(int vertex, int par)
 {
    vis[vertex]=true;
    bool isloopexist=false;
    for(int child:g[vertex])
    {
        if(vis[child]&&child==par) continue;
        if(vis[child]) return true;
        isloopexist |=dfs(child,vertex);
    }
    return isloopexist;
 }

int main()
{
    int n,e;
    cin>>n>>e;
    for(int i=0;i<e;++i)
    {
        int x,y;
        cin>>x>>y;
        g[x].push_back(y);
        g[y].push_back(x);
    }
    bool isloopexist=false;
    for(int i=1;i<=n;++i)
    {
        if(vis[i]) continue;
        if(dfs(i,0))
        {
          isloopexist=true;
          break;
        }
        // ct++;
    }
    cout<<isloopexist<<endl;


    return 0;
}
```