```cpp
#include <bits/stdc++.h>
using namespace std;
typedef long long int ll;
ll Grafo[101][101];
bool visitados[101];
int m;

main(){
    int n,z,from,to,x,y;
    scanf("%d",&z);
    for(int v =0;v<z;v++){
        scanf("%d", &m);
        scanf("%d", &n);
        for(int i=0;i<m;i++){
            for(int j=0;j<m;j++){
                if(i==j)
                    Grafo[i][j] = 0;
                else
                    Grafo[i][j] = 100000000;
            }
        }
        for(int q=0;q<n;q++){
            scanf("%d %d",&from,&to);
            Grafo[from][to] = 1;
            Grafo[to][from] = 1;
        }
        scanf("%d %d",&x,&y);
        for (int k = 0; k < m; k++){
            for (int i = 0; i < m; i++){
                for (int j = 0; j < m; j++){
                    Grafo[i][j] = min(Grafo[i][j], Grafo[i][k] + Grafo[k][j]);
                }
            }
        }
        ll saida = 0;
        for(int i=0;i<m;i++)
            saida = max(Grafo[x][i]+Grafo[i][y],saida);

        cout << "Case " << v+1<< ": " << saida << endl;
    }
}
```