```c
#include <stdio.h>
#include <stdlib.h>
#define MAX 100

int adj[MAX][MAX];
int visited[MAX];

void dfs(int node, int n) {
    printf("%d ", node);
    visited[node] = 1;

    for (int i = 0; i < n; i++) {
        if (adj[node][i] == 1 && !visited[i]) {
            dfs(i, n);
        }
    }
}

int main() {
    int n = 4;
    for (int i = 0; i < MAX; i++) {
        visited[i] = 0;
    }
    adj[0][1] = adj[1][0] = 1;
    adj[0][2] = adj[2][0] = 1;
    adj[1][2] = adj[2][1] = 1;
    adj[2][3] = adj[3][2] = 1;
    adj[3][3] = 1;

    printf("DFS traversal from node 2:\n");
    dfs(2, n);
    return 0;
}
```

Output:

```
sammj@SAM_LAPTOP MINGW64 ~/DS LAB
$  /usr/bin/env c:\\Users\\sammj\\.vscode\
soft-MIEngine-In-fpweuvms.3p2 --stdout=Mic
nag324gy.sa0 --dbgExe=C:\\msys64\\ucrt64\\
DFS traversal from node 2:
2 0 1 3
```

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9b)
```
#include <stdio.h>
#include <stdlib.h>
#define MAX 100

int adj[MAX][MAX];
int visited;

void dfsfor

void dfs(int node, int n)
{
    printf("%d ", node);
    visited[node] = 1;

    for(int i=0; i<n; i++)
    {
        if(adj[node][i] == 1 && !visited[i])
        {
            dfs(i, n);
        }
    }
}

int main()
{
    int n=4;
    for(int i=0; i<MAX; i++)
    {
        visited[i] = 0;
        adj[0][1] = adj[1][0] = 1
        adj[0][2] = adj[2][0] = 1
        adj[1][2] = adj[2][1] = 1
        adj[2][3] = adj[3][2] = 1;
        adj[3][3] = 1
```

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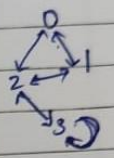
```
adj[3][3] = 1;

printf("DFS traversal from node 2:\n");
dfs(2, n);

return 0;
}
```

Output:

DFS traversal from node 2:
2 0 1 3



Scan
23/12/24