```c
#include <stdio.h>
#include <stdlib.h>
#define MAX 100
int graph[MAX][MAX];
int visited[MAX];
int n;
void DFS(int vertex) {
    printf("%d ", vertex);
    visited[vertex] = 1;
    for (int i = 0; i < n; i++) {
        if (graph[vertex][i] == 1 && !visited[i]) {
            DFS(i);
        }
    }
}
int main() {
    int edges, u, v, start;
    printf("Enter number of vertices: ");
    scanf("%d", &n);
    printf("Enter number of edges: ");
    scanf("%d", &edges);
    for (int i = 0; i < n; i++) {
        visited[i] = 0;
        for (int j = 0; j < n; j++) {
            graph[i][j] = 0;
        }
    }
    printf("Enter edges (u v):\n");
    for (int i = 0; i < edges; i++) {
        scanf("%d%d", &u, &v);
        graph[u][v] = 1;
        graph[v][u] = 1;
    }
    printf("Enter starting vertex for DFS: ");
    scanf("%d", &start);
    printf("DFS traversal starting from vertex %d: ", start);
    DFS(start);
    return 0;
}
```

```
C:\Users\upper\OneDrive\DATA STRUCTRES\ds - 454.exe

Enter number of vertices: 4
Enter number of edges: 5
Enter edges (u v):
2 3
4 5
45 56
3 8
4 5
Enter starting vertex for DFS: 2
DFS traversal starting from vertex 2: 2 3
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Process exited after 33.72 seconds with return value 0
Press any key to continue . . .
```