

32.

```
#include <stdio.h>
```

```
void dfs(int adj[10][10], int n, int v, int visited[]) {
```

```
    visited[v] = 1;
```

```
    printf("%d ", v);
```

```
    for (int i = 0; i < n; i++)
```

```
        if (adj[v][i] && !visited[i])
```

```
            dfs(adj, n, i, visited);
```

```
}
```

```
int main() {
```

```
    int adj[10][10], n, visited[10] = {0};
```

```
    printf("Enter number of vertices: ");
```

```
    scanf("%d", &n);
```

```
    printf("Enter adjacency matrix:\n");
```

```
    for (int i = 0; i < n; i++)
```

```
        for (int j = 0; j < n; j++)
```

```
            scanf("%d", &adj[i][j]);
```

```
    printf("DFS traversal: ");
```

```
    dfs(adj, n, 0, visited);
```

```
    return 0;
```

```
}
```

```
Enter number of vertices: 3
```

```
Enter adjacency matrix:
```

```
1 2 3
```

```
4 5 6
```

```
7 8 9
```

```
DFS traversal: 0 1 2
```