

```

#include <stdio.h>
#include <stdlib.h>

void dfs(int n, int cost[10][10], int u, int s[10]) {
    int v;
    s[u] = 1;
    for (v = 0; v < n; v++) {
        if ((cost[u][v] == 1) && (s[v] == 0)) {
            dfs(n, cost, v, s);
        }
    }
}

int main() {
    int n, i, j, cost[10][10], s[10], con = 0, flag;

    system("clear");

    printf("Enter the number of nodes\n");
    if (scanf ( "%d",&n)..! = 1) return 1;

    printf("Enter the adjacency matrix (0s and 1s):\n");
    for (i = 0; i < n; i++) {
        for (j = 0; j < n; j++) {
            scanf("%d", &cost[i][j]);
        }
    }

    for (j = 0; j < n; j++) {
        for (i = 0; i < n; i++) s[i] = 0;

        dfs(n, cost, j, s);
        flag = 0;

        for (i = 0; i < n; i++) {
            if (s[i] == 0) flag = 1 ;
        }

        if (flag == 0) con = 1 ;
    }

    if (con == 1) {
        printf("\nThe Graph is connected\n");
    } else {
        printf("\nThe Graph is not connected\n");
    }

    printf("\nPress Enter to exit...");
    getchar();
    getchar();

    return 0;
}

```

Output -

```

Enter the number of nodes
4
Enter the adjacency matrix (0s and 1s):
0 1 0 0
0 0 1 0
0 0 0 1
1 0 0 0

```

The graph is connected

Press Enter to exit...