```c
#include <stdio.h>

void dfs(int n, int cost[10][10], int u, int s[])
{
   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;
   int cost[10][10], s[10];
   int con = 0, flag;

   printf("Enter the number of nodes: ");
   scanf("%d", &n);

   printf("Enter the adjacency matrix:\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;
                break;
            }
        }

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

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

    return 0;
}
```

```
Enter the number of nodes: 4
Enter the adjacency matrix:
0 1 0 0
0 0 1 0
0 0 0 1
1 0 0 0
Graph is connected
```