

```

#include<stdio.h>
void DFS(int);
int G[10][10],visited[10],n;    //n is no of vertices and graph is sorted in
array G[10][10]
void main()
{
    int i,j;
    printf("Enter number of vertices:");

    scanf("%d",&n);
    //read the adjacency matrix
    printf("\nEnter adjacency matrix of the graph:");

    for(i=0;i<n;i++)
        for(j=0;j<n;j++)
            scanf("%d",&G[i][j]);
    //visited is initialized to zero
    for(i=0;i<n;i++){
        visited[i]=0;
    }
    int ct=0;
    for(i=0;i<n;i++)
    {
        if(visited[i])
            {continue;}
        DFS(i);
        ct++;
    }
    printf("%d",ct);
}
void DFS(int i)
{
    int j;
    //printf("\n%d",i);
    visited[i]=1;
    for(j=0;j<n;j++)
        if(!visited[j]&&G[i][j]==1)
            DFS(j);
}

```