```
#include<stdio.h>
void dfs(int v);
int count=0,n=0,a[10][10],visited[10];
void main()
{
int i,j,src;
printf("\n Enter the number of vertices:");
scanf("%d",&n);
printf("\nEnter the adjacency matrix: \n");
for(i=1;i<=n;i++)
for(j=1;j<=n;j++)
scanf("%d",&a[i][j]);
printf("\nEnter the source vertix:");
scanf("%d",&src);
for(i=1;i<=n;i++)
visited[i]=0;
printf("\nThe DFS traversal is :\n");
dfs(src);
if(count==n)
printf("\nGraph is connected\n\n");
else
printf("\nGraph is not connected\n\n");
}
void dfs(int v)
{
int i;
```

```
printf("\nThe visited vertex is %d\n",v);
visited[v]=1;
count++;
for(i=1;i<=n;i++)
if(a[v][i]==1 && visited[i]==0)
dfs(i);
}
```