

```
/*DEPTH FIRST SEARCH*/
```

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

```
void DFS(int);
```

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

```
void main()
```

```
{
```

```
    int i,j;
```

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

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

```
    printf("\nEnter adjacency matrix of Graph : ");
```

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

```
    {
```

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

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

```
    }
```

```
    DFS(0);
```

```
}
```

```
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);
```

```
}
```

```
=====
```

```
/*BREADTH FIRST SEARCH*/
```