

LAB-4

DFS_PrintNodesFromSource.c

```
#include<stdio.h>

void dfs(int);

int a[10][10],vis[10],n;

int main()
{
    int i,j,src;

    printf("enter no. of vertices\n");

    scanf("%d",&n);

    printf("enter adjacency matrix:\n");

    for(i=1;i<=n;i++)
    {
        for(j=1;j<=n;j++)
        {
            scanf("%d",&a[i][j]);
        }
    }

    for(i=1;i<=n;i++)
    vis[i]=0;
```

```
printf("enter source vertex\n");  
scanf("%d",&src);  
printf("nodes reachable from %d vertex\n",src);  
dfs(src);  
    return 0;  
}
```

```
void dfs(int v)  
{  
    int i;  
    vis[v]=1;  
    printf("%d",v);  
    for(i=1;i<=n;i++)  
    {  
        if(a[v][i]==1 && vis[i]==0)  
            dfs(i);  
    }  
}
```