

# 1BM21CS255

## CODE

```
#include<stdio.h>

void dfs(int);

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

void main()
{
    int i,j;

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

    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("DFS Traversal\n");

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

            dfs(i);
```

```

}
getch();
}
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);
}
}

```

## OUTPUT

```

Enter the number of vertices : 3
Enter adjacency matrix
0
1
1
1
0
9
1
9
0
DFS Traversal
123

```