**Experiment 22**

**Write a C program to Graph traversal using Depth First Search**

**DFS Program**

#include<stdio.h>

void DFS(int);

int G[10][10],visited[10],n;

void main()

{

int i,j;

printf("Enter number of vertices:");

scanf("%d",&n);

printf("\nEnter adjecency matrix of the graph:");

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

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

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

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

visited[i]=0;

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);

}

OUTPUT:

