```
//adjacency matrix DFS
#include<stdio.h>

void DFS(int);
int mat[10][10],visited[10],n;
void main()
{
int i,j,v;
char reply;

printf("How many vertices:");
scanf("%d",&n);
for ( i = 0 ; i < n ; i++ )
{
for ( j = 0 ; j < n ; j++ )
{

printf("\nIs there edge between %d & %d ? (Y/N/y/n) :",i,j);
scanf(" %c", &reply);
if ( reply == 'y' || reply == 'Y' )
mat[i][j] = 1;
else
mat[i][j] = 0;
}
}

for(i=0;i<n;i++)
visited[i]=0;

printf("\nEnter the start vertex: ");
scanf("%d",&v);
printf("\nDFS Traversal is:");
DFS(v);
printf("\n\n");
}

void DFS(int i)
{

int j;
printf("%d ",i);
visited[i]=1;

for(j=0;j<n;j++)
if(!visited[j] && mat[i][j]==1)
```

```
DFS(j);

}
```