```
#include<stdio.h>
#include<conio.h>
int a[20][20],reach[20],n;
void dfs(int v) {
        int i;
        reach[v]=1;
        for (i=1;i<=n;i++)
          if(a[v][i] && !reach[i]) {
                printf("\n %d->%d",v,i);
                dfs(i);
        }
}
int main() {
        int i,j,count=0;

        printf("\n Enter number of vertices:");
        scanf("%d",&n);
        for (i=1;i<=n;i++) {
                reach[i]=0;
                for (j=1;j<=n;j++)
                  a[i][j]=0;
        }
        printf("\n Enter the adjacency matrix:\n");
        for (i=1;i<=n;i++)
          for (j=1;j<=n;j++)
           scanf("%d",&a[i][j]);
        dfs(1);
        printf("\n");
        for (i=1;i<=n;i++) {
                if(reach[i])
                  count++;
```

```
    }
    if(count==n)
      printf("\n Graph is connected"); else
      printf("\n Graph is not connected");

}
```