AIM:

Write a program to simulate flow based routing.

PROGRAM:

#include<stdio.h>

#include<conio.h>

#include<process.h>

int path[20],ind=0,visited[20];

void find\_path(int graph[20][20],int s,int d,int n)

{

int i=0;

visited[s]=1;

if(s==n)

return;

if(s==d){

printf("path selected is:");

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

printf("%d->",path[i]);

printf("%d",d);

exit(0); }

path[ind++]=s;

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

if(graph[s][i]==1&&visited[i]==0)

find\_path(graph,i,d,n); }

}

void main()

{

int graph[20][20],i,j,n,s,d;

clrscr();

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

scanf("%d",&n);

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

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

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

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

printf("enter the source node:");

scanf("%d",&s);

printf("enter the destination node:");

scanf("%d",&d);

find\_path(graph,s,d,n);

getch();

}

/\*output:

enter the number of vertices:4

enter the adjacency matrix:

0 1 0 0

1 0 1 0

0 1 0 1

0 0 1 0

enter the source node:0

enter the destination node:3

path selected is:0->1->2->3\*/