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#include<stdio.h>

#include<conio.h>

int a[20][20],q[20],visited[20],n,i,j,f=0,r=-1;

void bfs(int v) {
for (i=1;i<=n;i++)

if(a[v][i] && !visited[i])

q[++r]=i;

if(f<=r) {

visited[q[f]]=1;

bfs(q[f++]);

}

}

int main() {

int v;

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

scanf("%d",&n);

for (i=1;i<=n;i++) {

q[i]=0;

visited[i]=0;

}

printf("\n Enter graph data in matrix form:\n");

for (i=1;i<=n;i++)

for (j=1;j<=n;j++)

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

printf("\n Enter the starting vertex:");

scanf("%d",&v);

bfs(v);

printf("\n The node which are reachable are:\n");

for (i=1;i<=n;i++)

if(visited[i])

printf("%d\t",i); else

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printf("\n Bfs is not possible");
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}
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Enter the number of vertices:2
Enter graph data in matrix form:
2
3
5
6

Enter the starting vertex:2

The node which are reachable are:
1      2
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Process exited after 11.96 seconds with return value 0
Press any key to continue . . . _
```