```c
#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
```

```
printf("\n Bfs is not possible");
```

```
 Enter the number of vertices:2

 Enter graph data in matrix form:
4
5
6
3

 Enter the starting vertex:2

 The node which are reachable are:
1      2
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Process exited after 20.32 seconds with return value 0
Press any key to continue . . .
```

}