```c
#include<stdio.h>

#include<conio.h>

int a[30][30],vis[10],n;

void bfs(int);

void main()

{

    int i,j,m,p,q,start;

    printf("enter no. of vertices\n");

    scanf("%d",&n);

    printf("enter no. of edges\n");

    scanf("%d",&m);

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

    {

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

            a[i][j]=0;

        }

    }

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

        printf("enter an edge\n");

        scanf("%d%d",&p,&q);

        a[p][q]=1;

    }

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

        vis[i]=0;

    }
```

```c
    printf("enter the starting vertex\n");

    scanf("%d",&start);

    printf("nodes reachable from starting vertex are\n");

    bfs(start);

    getch();

}


void bfs(int v)

{

    int i, q[30],f=0,r=0,u;

    vis[v]=1;

    q[r]=v;

    while(f<=r){

        u=q[f];

        printf("%d",u);

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

            if(a[u][i]==1&& vis[i]==0){

                r=r+1;

                q[r]=i;

                vis[i]=1;

            }

        }

f=f+1;

}

}
```

```
C:\Users\bmsce\Desktop\1BM21CS220\BSF.exe                           —    □    ×

enter no. of vertices
5
enter no. of edges
6
enter an edge
1 5
enter an edge
1 2
enter an edge
2 5
enter an edge
2 4
enter an edge
3 1
enter an edge
3 4
enter the starting vertex
1
nodes reachable from starting vertex are
1254
```