**Write a program to traverse a graph using the BFS method.**

#include<stdio.h>

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

void bfs(int i);

void main(){

int i,j,src;

printf("Enter no of terms:");

scanf("%d",&n);

printf("Enter adjacency matrix\n");

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

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

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

}

}

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

vis[i]=0;

}

printf("Enter source vertex(0 to %d):",n-1);

scanf("%d",&src);

if(src<0 || src>=n){

printf("Invalid source vertex\n");

return ;

}

printf("Nodes reachable from vertex %d\n",src);

bfs(src);

}

void bfs(int v){

int q[10],f=0,r=-1,u,i;

q[++r]=v;

vis[v]=1;

while(f<=r){

u=q[f++];

printf("%d\t",u);

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

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

vis[i]=1;

q[++r]=i;

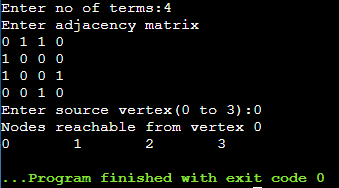
}

}

}

}

**Output:**

****