# STATE UNIVERSITY OF BANGLADESH


**Course Code: CSE-0408**
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**Question: Write a program about BFS implementation in any language [C, C++, JAVA, PYTHON]**

Solution:

```
#include <iostream>
#include<conio.h>
#include<stdlib.h>
#include <bits/stdc++.h>

using namespace std;
int c[10][10],i,j,k,n,q[10],front,rare,v,visit[10],visited[10];
int main()
{
	int m;
	cout <<"Enter no of vertices:";
	cin >> n;
	cout <<"Enter no of edges:";
	cin >> m;
	cout <<"\nEDGES \n";
	for(k=1; k<=m; k++)
{
	cin >>i>>j;
	c[i][j]=1;
}
	cout <<"Enter initial vertex to traverse from:";
	cin >>v;
	cout <<"Visited vertices:";
	cout <<v<<" ";
	visited[v]=1;
	k=1;
	while(k<n)
{
	for(j=1; j<=n; j++)
	if(c[v][j]!=0 && visited[j]!=1 && visit[j]!=1)
{
	visit[j]=1;
	q[rare++]=j;
}
	v=q[front++];
```

```
        cout<<v <<" ";
        k++;
        visit[v]=0;
        visited[v]=1;
}
        return 0;
}
```

## Output: