

## 1. BFS

```
#include<stdio.h>
#include <queue>

int V = 5;
int visited[5];
int G[5][5] = {
    {0,1,0,0,1},
    {1,0,0,1,1},
    {0,0,0,1,0},
    {0,1,1,0,1},
    {1,1,0,1,0}
};

void BFS(int v)
{
    std::queue<int> Q;

    visited[v] = 1;
    printf("%d ", v);
    Q.push(v);

    while(!Q.empty())
    {
        int current = Q.front();
        Q.pop();
        for(int j=0; j<V; j++)
        {
            if(G[current][j]==1 && visited[j]==0)
            {
                visited[j] = 1;
                printf("%d ", j);
                Q.push(j);
            }
        }
    }
}
```

```

    }
}
int main()
{
    BFS(0);
}

```

## 2. DFS

```

#include<stdio.h>
int V = 5;
int visited[5];
int G[5][5] = {
    {0,1,0,0,1},
    {1,0,0,1,1},
    {0,0,0,1,0},
    {0,1,1,0,1},
    {1,1,0,1,0}
};

void DFS(int current)
{
    visited[current] = 1;
    printf("%d ", current);

    for(int j=0; j<V; j++)
    {
        if(G[current][j]==1 && visited[j]==0)
        {
            DFS(j);
        }
    }
}

```

```
int main()
{
    DFS(0);
}
```