

```
Enter number of vertices: 4
Enter adjacency matrix of the graph:
0 1 1 0
1 0 1 1
1 1 0 1
0 1 1 0
Enter starting vertex for BFS: 0
BFS Traversal: 0 1 2 3

Process returned 0 (0x0)   execution time : 23.615 s
Press any key to continue.
```

Activate Windows
Go to Settings to activate Windows.

Type here to search



Gold +0.95% ENG 11:53:01 AM 01-12-2025

```

#include <stdio.h>
#include <stdlib.h>

#define MAX 100

int queue[MAX], front = -1, rear = -1;
int visited[MAX];

void enqueue(int v) {
    if (rear == MAX - 1)
        printf("Queue Overflow\n");
    else {
        if (front == -1)
            front = 0;
        rear++;
        queue[rear] = v;
    }
}

int dequeue() {
    int v;
    if (front == -1 || front > rear)
        return -1;
    else {
        v = queue[front];
        front++;
        return v;
    }
}

void BFS(int adj[MAX][MAX], int n, int start) {
    int i, current;

    for (i = 0; i < n; i++)
        visited[i] = 0;

    enqueue(start);
    visited[start] = 1;

    printf("BFS Traversal: ");
}

```

blocks × Search results × Cccc × Build log × Build messages × CppCheck/Vera++ × CppCheck/Vera++ messages × Cscope × Debugger × DoxyBlocks × Fortran info × Closed files list × Thread search ×

Project Projectfile

Activate Windows
 Go to Settings to activate Windows.

lists_insertion.c

C/C++

Windows (CR+LF)

WINDOWS-1252

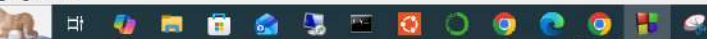
Line 70, Col 1, Pos 1364

Insert

Read/Write

default

EN



Gold +0.96% ENG 11:51:54 AM 01-12-2025

```
visited[i] = 0;
enqueue(start);
visited[start] = 1;

printf("BFS Traversal: ");

while ((current = dequeue()) != -1) {
    printf("%d ", current);

    for (i = 0; i < n; i++) {
        if (adj[current][i] == 1 && !visited[i]) {
            enqueue(i);
            visited[i] = 1;
        }
    }
}

printf("\n");
}

int main() {
    int n, i, j, start;
    int adj[MAX][MAX];

    printf("Enter number of vertices: ");
    scanf("%d", &n);

    printf("Enter adjacency matrix of the graph:\n");
    for (i = 0; i < n; i++)
        for (j = 0; j < n; j++)
            scanf("%d", &adj[i][j]);

    printf("Enter starting vertex for BFS: ");
    scanf("%d", &start);

    BFS(adj, n, start);

    return 0;
}
```

locks X Search results X Cccc X Build log X Build messages X CppCheck/Vera++ X CppCheck/Vera++ messages X Cscope X Debugger X DoxyBlocks X Fortran info X Closed files list X Thread search X

Project Projectfile

Activate Windows
Go to Settings to activate Windows.