

\*bfsc - CodeBlocks 25.03

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Management Projects Symbols Files Workspace

Start here X \*dftsc X \*bfsc.c X

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 #define MAX 20
5
6 struct Node
7 {
8     int vertex;
9     struct Node* next;
10 };
11
12 struct Node* adj[MAX];
13 int visited[MAX];
14 int queue[MAX], front = 0, rear = 0;
15 int n;
16
17 void addEdge(int src, int dest)
18 {
19     struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
20     newNode->vertex = dest;
21     newNode->next = adj[src];
22     adj[src] = newNode;
23 }
24
25 void bfs(int start)
26 {
27     int v;
28     queue[rear++] = start;
29     visited[start] = 1;
30
31     printf("BFS Traversal: ");
32     while (front < rear)
33     {
34         v = queue[front++];
35         printf("%d ", v);
36
37         struct Node* temp = adj[v];
38
39         while (temp != NULL)
40         {
```

Logs & others

C:\Users\BMSCECSE-LA\Desktop\bfsc.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 38, Col 9, Pos 675 Insert Modified Read/Write default

11:26:21 08-12-2025 ENG IN

\*bfsc - CodeBlocks 25.03

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Management X Start here X \*dfs.c X \*bfsc.c X

```
31     printf("BFS Traversal: ");
32     while (front < rear)
33     {
34         v = queue[front++];
35         printf("%d ", v);
36
37         struct Node* temp = adj[v];
38
39         while (temp != NULL)
40         {
41             if (!visited[temp->vertex])
42             {
43                 queue[rear++] = temp->vertex;
44                 visited[temp->vertex] = 1;
45             }
46             temp = temp->next;
47         }
48     }
49 }
50
51 int main()
52 {
53     int edges,src,dest,start;
54
55     printf("Enter number of vertices: ");
56     scanf("%d", &n);
57
58     printf("Enter number of edges: ");
59     scanf("%d", &edges);
60
61     for (int i = 0; i < edges; i++)
62     {
63         printf("Enter edge (src dest): ");
64         scanf("%d %d", &src, &dest);
65
66         addEdge(src, dest);
67         addEdge(dest, src);
68     }
69
70     printf("Enter starting vertex: ");
```

Logs & others

C:\Users\BMSCECSE-LA\Desktop\bfsc C/C++ Windows (CR+LF) WINDOWS-1252 Line 38, Col 9, Pos 675 Insert Modified Read/Write default

\*bfsc - Code::Blocks 25.03

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Management Start here \* dfsc.c \* bfsc.c

Workspace

```
39     while (temp != NULL)
40     {
41         if (!visited[temp->vertex])
42         {
43             queue[rear++] = temp->vertex;
44             visited[temp->vertex] = 1;
45         }
46         temp = temp->next;
47     }
48 }
49
50
51 int main()
52 {
53     int edges,src,dest,start;
54
55     printf("Enter number of vertices: ");
56     scanf("%d", &n);
57
58     printf("Enter number of edges: ");
59     scanf("%d", &edges);
60
61     for (int i = 0; i < edges; i++)
62     {
63         printf("Enter edge (src dest): ");
64         scanf("%d %d", &src, &dest);
65
66         addEdge(src, dest);
67         addEdge(dest, src);
68     }
69
70     printf("Enter starting vertex: ");
71     scanf("%d", &start);
72
73     bfs(start);
74
75 }
76
```

Logs & others

C:\Users\BMSCECSE-LA\Desktop\bfsc

C/C++ Windows (CR+LF) WINDOWS-1252 Line 72, Col 1, Pos 1387 Insert Modified Read/Write default

11:27:24 08-12-2025 ENG IN

\*dfs.c - Code::Blocks 25.03

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Management Projects Symbols Files

Workspace

Start here × \*dfs.c ×

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 #define MAX 20
5
6 struct Node
7 {
8     int vertex;
9     struct Node* next;
10 };
11
12 struct Node* adj[MAX];
13 int visited[MAX];
14 int n;
15
16 void addEdge(int src, int dest)
17 {
18     struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
19     newNode->vertex = dest;
20     newNode->next = adj[src];
21     adj[src] = newNode;
22 }
23
24 void dfs(int v)
25 {
26     visited[v] = 1;
27
28     struct Node* temp = adj[v];
29     while (temp != NULL)
30     {
31         if (!visited[temp->vertex])
32             dfs(temp->vertex);
33         temp = temp->next;
34     }
35 }
36
37 int main()
38 {
39     int edges, src, dest;
40 }
```

Logs & others

Code:Blocks × Search results × Ccc × Build log × Build messages × CppCheck/Vera++ × CppCheck/Vera++ messages × Cscope × Debugger × Doxygen × Fortran info × Closed files list × Thread search ×

File Line Message

==== Build file: "no target" in "no project" (compiler: unknown) ====
==== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

C:\Users\BMSCECSE-LA\Desktop\dfs.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 5, Col 1, Pos 59 Insert Modified Read/Write default

11:15:11 08-12-2025 ENG IN

The screenshot shows the Code::Blocks IDE interface. The main window displays a C source code file named "dfs.c". The code implements a Depth First Search (DFS) algorithm to determine if a graph is connected. It includes functions for adding edges to a graph and performing DFS from a given vertex. The build log at the bottom shows that the build was successful with no errors or warnings.

```
*dfs.c - Code::Blocks 25.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins Doxygen Settings Help
Management Start here × *dfs.c ×
31     if (!visited[temp->vertex])
32         dfs(temp->vertex);
33     temp = temp->next;
34 }
35
36
37 int main()
38 {
39     int edges, src, dest;
40
41     printf("Enter number of vertices: ");
42     scanf("%d", &n);
43
44     printf("Enter number of edges: ");
45     scanf("%d", &edges);
46
47     for (int i = 0; i < edges; i++)
48     {
49         printf("Enter edge (src dest): ");
50         scanf("%d %d", &src, &dest);
51         addEdge(src, dest);
52         addEdge(dest, src);
53     }
54
55     dfs(1);
56
57     for (int i = 1; i <= n; i++)
58     {
59         if (!visited[i])
60         {
61             printf("Graph is NOT Connected\n");
62             return 0;
63         }
64     }
65
66     printf("Graph is Connected\n");
67
68 }
```

Logs & others

File	Line	Message
		==== Build file: "no target" in "no project" (compiler: unknown) ==== ==== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===

C:\Users\BMSCECSE-LA\Desktop\dfs.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 67, Col 2, Pos 1194 Insert Modified Read/Write default 11:15:26 08-12-2025 ENG IN

C:\Users\BMSCECSE-L4\Desktop\bfs.exe

```
Enter number of vertices: 5
Enter number of edges: 6
Enter edge (src dest): 1
2
Enter edge (src dest): 1
3
Enter edge (src dest): 2
4
Enter edge (src dest): 3
4
Enter edge (src dest): 3
5
Enter edge (src dest): 4
5
Enter starting vertex: 1
BFS Traversal: 1 3 2 5 4
Process returned 0 (0x0) execution time : 41.034 s
Press any key to continue.
```

C:\Users\BMSCECSE-L4\Desktop\dfs.exe

```
Enter number of vertices: 5
Enter number of edges: 6
Enter edge (src dest): 1
2
Enter edge (src dest): 1
3
Enter edge (src dest): 2
4
Enter edge (src dest): 3
4
Enter edge (src dest): 3
5
Enter edge (src dest): 4
5
Graph is Connected
```

Process returned 0 (0x0) execution time : 46.865 s
Press any key to continue.