

Поиск в ширину (breadth-first search) BFS

```
def bfs(v):  
    used = [False] * V  
    d = [∞] * V  
    d[v] = 0  
    q = Queue()  
    q.push(v); used[v] = True  
    while q is not empty:  
        u = q.pop()  
        for w in edges[u]:  
            if not used[w]:  
                q.push(w)  
                used[w] = True  
                d[w] = d[u] + 1
```

$v \rightarrow \begin{matrix} 1 \\ \vdots \\ n \end{matrix}$

$$T = O(V + E)$$
$$M = O(V)$$

