

## Queue Built-in Functions

### 1. Constructor

Name	Details	Time Complexity
<code>queue&lt;type&gt;q;</code>	Construct an empty queue.	O(1)
<code>queue&lt;type&gt;q(c);</code>	Construct a queue by copying another container c.	O(N)

### 2. Capacity

Name	Details	Time Complexity
<code>q.size()</code>	Returns the number of elements in the queue.	O(1)
<code>q.empty()</code>	Returns true if the queue is empty, false otherwise.	O(1)

### 3. Modifiers

Name	Details	Time Complexity
<code>q.push(value)</code>	Pushes the value onto the end of the queue.	O(1)
<code>q.pop()</code>	Removes the element at the front of the queue.	O(1)
<code>q.emplace(args...)</code>	Constructs and inserts a new element at the end of the queue.	O(1)
<code>q.swap(queue)</code>	Exchanges the contents of the queue with those of another queue.	O(1)

### 4. Element Access

Name	Details	Time Complexity
<code>q.front()</code>	Returns a reference to the front element in the queue.	O(1)
<code>q.back()</code>	Returns a reference to the last element in the queue.	O(1)