

Priority Queue

```
`#include <queue>
```

```
std::priority_queue<DataType> priorityQueueName;`
```

Unveiling Priority Queues:

- Priority Queue & Heap: Tied to heap data structure for efficient management.
- Max Heap Magic: Default priority queue yields the greatest value first. Can also craft a min heap using vector and slight adjustments.
- Fetch Logic: Max heap delivers the largest element; min heap, the smallest.
- Priority Queue Toolbox: Methods encompass push, pop, top, size, empty, streamlining element handling.

Methods

1. `push(value)`: Pushes an element onto the priority queue.
2. `pop()`: Removes the top element (the highest-priority element) from the priority queue.
3. `top()`: Accesses the top element (the highest-priority element) of the priority queue.
4. `size()`: Returns the number of elements in the priority queue.
5. `empty()`: Checks if the priority queue is empty (i.e., if its size is zero).