



## Detail

# Queue in Standard Template Library

*(Training materials for students)*

Queues are a type of container adaptors which operate in a first in first out (FIFO) type of arrangement. Elements are inserted at the back (end) and are deleted from the front.

### The functions supported by queue are :

- **empty()** – Returns whether the queue is empty.
- **size()** – Returns the size of the queue.
- **queue::swap()** in C++ STL: Exchange the contents of two queues but the queues must be of same type, although sizes may differ.
- **queue::emplace()** in C++ STL: Insert a new element into the queue container, the new element is added to the end of the queue.
- **queue::front()** and **queue::back()** in C++ STL– **front()** function returns a reference to the first element of the queue. **back()** function returns a reference to the last element of the queue.
- **push(g)** and **pop()** – **push()** function adds the element 'i' at the end of the queue. **pop()** function deletes the first element of the queue.

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