C, C++, DSA in depth

Queue

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Agenda

① Queue

② Creating Queue object

③ Queue methods

Queue

A template container adaptor class that provides a restriction of functionalities, limiting access to the front and back elements.

Elements can be added at the back or removed from the front, and elements can be inspected at either end of the queue.

Queue

The queue class supports a first in first out data structure

Queue can be used as an implementation of deque, list or any other sequence container that supports the operations of back, push_back and pop_front, front

Queue

The underlying container class is encapsulated within the container adaptor, which exposes only the limited set of the sequence container member functions as a public interface.

The header for the STL queue library is queue.

How to create a queue object?

```
queue <int, deque<int>> q1;
queue <int, list<int>> q2;
```

Methods of queue

back()
front()
empty()
pop()
push()
size()