**Heaps STL**

1. We have a priority\_queue container in the Standard Template Library for Heaps.
2. By default, priority\_queue in STL is a MaxHeap.

Declaration

1. MaxHeap

*priority\_queue<int, vector<int> > pq;*

1. MinHeap

To declare MinHeap, we take one more parameter that is *greater<int>*.

*priority\_queue<int, vector<int>, greater<int> > pq;*

Note: We can take any datatype for the node in priority\_queue such as pair<int,int> etc. For that we just need to replace *int* with *pair<int,int>.*

**Different operations**

|  |  |  |
| --- | --- | --- |
| Operation | Description | Time Complexity |
| push() | Pushes the element into the heap.  Example: pq.push(9). | O(log(n)) |
| pop() | Pops the element from the heap.  Example: pq.pop(). | O(log(n)) |
| top() | Returns the top element of the heap.  Example: pq.top() | O(1) |
| size() | Returns the size of the heap.  Example: pq.size() | O(1) |