

Maxheap minheap Implementation

- MaxHeap

priority_queue<int> pq;

- MinHeap

priority_queue<int, vector<int>, greater<int>> pq

here greater<int> is a comparator function

priority queue is maxheap by default so to convert it we use this comparator.

We can also make a custom comparator function :

for custom comparator we need to make a class and overload operator function using :

```
class Compare {
public:
    bool operator()(PII a, PII b){
        if(cond){
            return true;
        }
        return false;
    }
};
```

priority_queue<PII, vector<PII>, Compare> ds;

this class name is passed instead of greater<int>

- When true is returned, it means the order is correct and NO swapping of elements takes place.
- When false is returned, it means the order is NOT correct and swapping of elements takes place.

The first parameter is the below element(top of heap) and the second parameter(element to be inserted) is above element.