

Announcements

Thursday, April 26, 2018 5:16 PM

- Final Exam - Optional
 - May 6th 1:30 PM
 - Reminder from syllabus: Must get a 65% average on your midterms to pass the class.
 - Final exam grade *will* be used to replace your lowest midterm grade.
 - Can expect similar format to midterms. Probably no CodeRunner.
- Next week
 - Monday - finish up performance, STL PQ
 - Wednesday - possibly no class... depends on demand
 - Will send out email
- Final project due - May 6th by 5 PM
- Today:
 - Finish up performance timing:
Bubble-sort vs heapsort
 - Priority Queue from STL library
 - 3 Parameters
 - Overloading the operator()
 -

Priority Queue from STL

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```
priority_queue<int> pq;
```

At least one parameter is required: type.

The other 2 parameters:

- container: vector is default
- compare: "less-than" is default

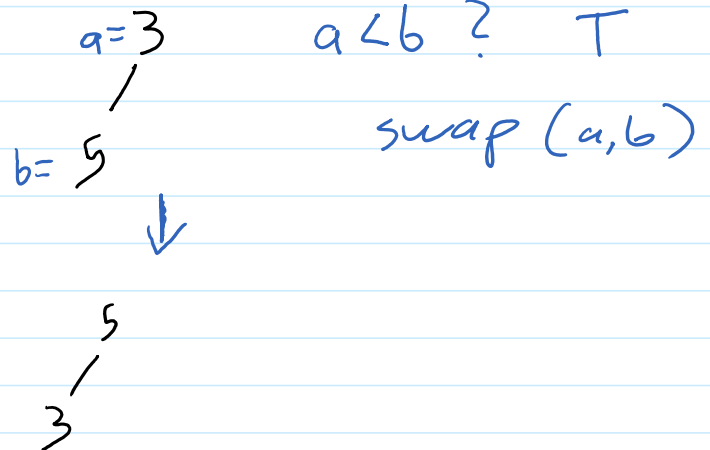
```
priority_queue<int, vector<int>, compare > pq2;
```

`compare(a, b)` will return `TRUE` if `a` is considered to go before `b`. By default, `a < b` comparison is applied.

e.g. `push(3)`
`push(5)`

What kind of heap
does default PQ template
create?

max-heap



What if we want a min-heap?

need to overload compare.

```
struct compare
{
    bool operator()(const int &a, const int &b)
    {
        return a > b;
    }
}
```

};

Overload the `()` operator when used with
compare struct.