CS 311 - HW 8 - 100 points

Priority queue

Implement a **priority printer queue** using an array.

Steps:

1. Refer to **Lecture 16** for the description of Heap sort and Priority queue.
2. Complete the attached **pqueue.cpp** and test it with client program **pqclient.cpp** (Do NOT change the client file). Enter the results to your **test1.txt**. Make sure the output is exactly the same as output given at the end of this file. Check the results carefully.

Submission

Submit a zip file containing the following files.

1. pqueue.h (0 points) -- pqueue class header file (Do NOT change it)
2. pqueue.cpp (100 points) -- pqueue class implementation
3. pqclient.cpp (0 points) -- the implemented application (Do NOT change it)
4. test1.txt (5 points) -- results of Test1

Important note1: You will miss up to 10 points if you don't comment your programs.

Important Note2: Always make sure the files you submit can be compiled on **empress.csusm.edu** with no error. We will compile and test your files on empress.

Output:

Make sure the output is the same as following including exact indents and spaces (like a tree).

```
Adding: 20
Adding: 12
Jobs: 12 20
  12
20
Adding: 30
Adding: 1
Jobs: 1 12 30 20
    1
  12 30
20
Adding: 5
Adding: 6
Adding: 7
Jobs: 1 5 6 20 12 30 7
```

```
       1
     5 6
 20 12 30 7
printing: 1
Jobs: 5 7 6 20 12 30
      5
    7 6
20 12 30
printing: 5
Jobs: 6 7 30 20 12
     6
   7 30
20 12
printing: 6
Jobs: 7 12 30 20
    7
  12 30
20
printing: 7
Jobs: 12 20 30
   12
 20 30
Adding: 2
Jobs: 2 12 30 20
    2
  12 30
20
Adding: 3
Jobs: 2 3 30 20 12
     2
   3 30
20 12
```