

COSC 2436 lab 3: Priority Queue

1. Introduction

You will create a C++ program that can organize the order of tasks base on their priority. In a priority queue, a task with high priority is served before a task with low priority. A task said to have a higher priority if it took less amount of time to complete.

2. Input and Output

a. Input file

Each line will contain a string and a number, separated by a space.

The string is the name of the task that you need to organize.

The number will be the time needed to complete that task.

Input might have empty line (ignore empty line).

b. Output file

Output the task in order according to their priority.

If two or more tasks have the same priority, organize them based on the order that they were queued.

3. Example Output

input1.txt

Answer Phone 1

Booking Appointment 0.5

Organize Documents 2

Schedule Meeting 0.5

Data Entry 4

output1.txt

Booking Appointment

Schedule Meeting

Answer Phone

Organize Documents

Data Entry

4. Turn in your lab assignment

Lab 3 needs to be turned in to our Linux server, follow the link here

https://rizk.netlify.app/courses/cosc2430/2_resources/

Make sure to create a folder under your root directory, name it lab3 (name need to be lower case), copy your code and argumentmanager.h to this folder, no testcase or other files needed.

PS: This document may have typos, if you think something illogical, please email TAs for confirmation.