Zkoušková písemka z C++

1.2.2019

Instructions

- 4 hours
- Wait for evaluation
 - Earlier submission -> 1 correction
- Load all sources into SIS (even if not succesfull)
- 60 points (50 ~ functionality, 10 ~ style)
 - Minimal 18 points
- Cheats
 - Internet only for C++ references e.g. cppreference, cplusplus,...
 - No stackoverflow, atd...
 - Slides
- Don't use any existing code

Notes manager

Input:

[line count]
[cmd] [priority] [year] ([month]) ([day]) "[msg]"

- **[cmd]** (char)
 - i insert on given date (year/year+month/year+month+day)
 - **d** delete all records from given date (year/year+month/year+month+day)
 - p print sorted by inserted order,
 - pp print sorted by priority (lower first)
 - pd print sorted by date (sooner first)
- **[priority]** integer
- **year]** integer, 0 <= year <= 3000
- **[month] -** integer, optional, 1 <= month <= 12
- [day] integer, optional, if included -> month included too;
- "[msg]" string, inside quotes, can contains spaces

Output:

for valid line -> "ok" for invalid line -> "invalid" + exit program for print -> print whole record

Notes:

- Format of the input is correct, numbers might not be -> invalid
- No leap year (February has 28 days)
- If sorting by date and record has no value -> put it at the end (sort by insertion order)
- Sort secondary by insertion order
- If delete/print empty -> print "ok"
- Try redirect the example into the program
- Minimal: no date check + no invalid + insert + delete + not sorted print (see webpage)

Example:

```
15 //> ok
p 2018 //> ok
i 3 2000 12 3 "Note Dec 3rd" //> ok
i 3 2000 1 1 "New Year" //> ok
i-10 2019 2 1 "cpp exam" //> ok
d 2000 //> ok
p 2000 //> ok
p 2000 1 1 //> ok
i 0 2019 "good year" //> ok
i 0 2019 3 "March 2019" //> ok
pp 2019
//> ok
//> -10 2019 2 1 "cpp exam"
//> 0 2019 "good year"
//> 0 2019 3 "March 2019"
d 2019 2 29
//> invalid
// program exits
```