Weather Man

<u>This repo</u> contains weather files for Murree. Write an application that generates the following reports. The user can specify more than one report at the same time. You have <u>3 days</u> to submit the first iteration from the day you are assigned this task.

The program should be designed as follows:

- 1. Define a data structure for holding each weather reading.
- 2. Define a class for parsing the files and populating the readings data structure with correct data types.
- 3. Define a data structure for holding the calculations results.
- 4. Define a class for computing the calculations given the readings data structure.
- 5. Define a class for creating the reports given the results data structure.
- 6. Define *main* for assembling the above and running the program.
- 7. Pep-8 conventions should be followed in the code.
- 1. For a given year display the highest temperature and day, lowest temperature and day, most humid day and humidity.

weatherman.py /path/to/files-dir -e 2002

Highest: 45C on June 23 Lowest: 01C on December 22 Humidity: 95% on August 14

2. For a given month display the average highest temperature, average lowest temperature, average mean humidity.

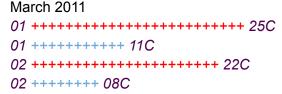
weatherman.py /path/to/files-dir -a 2005/6

Highest Average: 39C Lowest Average: 18C

Average Mean Humidity: 71%

3. For a given month draw two horizontal bar charts on the console for the highest and lowest temperature on each day. Highest in red and lowest in blue.

weatherman.py /path/to/files-dir -c 2011/03



4. Multiple Reports

weatherman.py /path/to/files-dir -c 2011/03 -a 2011/3 -e 2011

5. BONUS TASK. For a given month draw one horizontal bar chart on the console for the highest and lowest temperature on each day. Highest in red and lowest in blue.

weatherman.py /path/to/files-dir -c 2011/3



Use the lab for versioning. Send your gitlab username to your mentor.