

You shall submit a zipped, **and only zipped**, archive of your homework directory, hw1. The directory shall contain, at a minimum, the file `parse_score.cc`.

I will use my own makefile to make your `parse_score.cc` file. Do not use a header for this assignment. My grader will not look for one.

I have a large amount of text data with student scores stored as series of integers and floating point values. I would like to read that data in JSON format.

Given the format: `number_of_students student.id number_of_grades grade_0 grade_1 grade_n`

Read in each of the `number_of_students` students and write their id and `number_of_grades` grades to the standard output stream as indicated in the provided source code.

The application should perform as follows:

- The program is called and is run with no prompt for input:

```
./parse_source
```

- The program reads from the standard input stream a series of characters in the indicated format e.g.

```
2 1234 3 98.7 87.92 77.32 2345 3 93.1 90.23 81.21
```

and parses the values as indicated in the given source file:

```
{
  "students" : [
    { "id" : 1234, "grades" : [ 98.7, 87.92, 77.32 ] },
    { "id" : 2345, "grades" : [ 93.1, 90.23, 81.21 ] }
  ],
  "max_id" : 1234,
  "max_score" : 98.7
}
```

- I have provided you a basic test app which you can use to ensure that your code is somewhat passing. I do not test the individual values of “id” and “grade”, but I will in my full tester. This means that, while you could only print the “max_id” and “max_score” to pass the provided tester, you will not pass my full tester.
- If you are having problems getting valid JSON, copy the output from your program and try a JSON validator such as: <https://jsonformatter.curiousconcept.com/>

I have provided you source for `parse_scores` app and a make file. In addition, I have given you a python script to test your app. You should definitely read the makefile and I would encourage you to read the python. It is simple code and an easy intro to python.

Late assignments will lose 25% per day late, with no assignment begin accepted after 4 days (100% reduction in points).

Check your syllabus for the breakdown of grading.