Lovely Engineering -- Backend Challenge #1 XML

## Instructions

XML data is a big part of Lovely engineering. Lots of our data starts as xml. Your task will be to write a program that processes a large xml file and aggregates the data inside that file.

Here is the link to the xml file. It contains thousands of apartments available for rent. It also

has the monthly rent, numbers of beds, baths, and square footage.

Your program will be run with a different XML file then the one given you here. It will be in the same format.

Your program will be judged on the speed of execution and the method of your solution.

## Requirements

You will write a Python program that accepts a command line argument of the path of an xml file.

Your program will print the following metrics to standard out

1. Highest monthly rent
2. Lowest monthly rent
3. Average 1 bedroom square footage in CA
4. Highest price per square foot
5. Number of apartments in San Francisco, CA
6. Number of apartments with 2 bathrooms in New York, NY
7. Average rent of 1 bedroom apartments in San Francisco, CA and Los Angeles, CA
8. **Bonus:** Define your own metric

Sample Input:

python solution.py /home/ubuntu/test\_file.xml

Sample Output:

Highest Rent: $1110

Lowest Rent: $1

...

Average Rent 2 Bathrooms NY: $3100

Average Rent 1 Bedroom in SF and LA: $2225

## Deliverables

Please tar your code and send it in an email to jobs@livelovely.com

Also, please include a text file containing a brief paragraph describing problems you overcame while solving the challenge and anything you learned that was worthwhile.