Please use Python to solve the following. Zip the code and any additional documentation. The code maybe a .py file or jupyter notebook. You are free to use any library in (<https://docs.anaconda.com/anaconda/packages/py3.8_win-64/>)

Submit the code used and a quick writeup for a non-technical audience.

Use the [namesbystate.zip](https://www.ssa.gov/oact/babynames/limits.html) to answer the following questions:

1. For the entire US, in 1989 what is the top male and female name? How many states were these names number 1 for in 1989?
2. For the entire US, find the top 5 male and female names for each decade.
3. For California (CA), what is the most common male name in 1992 that has never been in the top 100 male names in California for any year?

Use the test.log file to answer the following questions:

1. Find all the ruser’s in the file:
2. Find all the rusers who have been to the following rhost
   1. 82.77.200.128
   2. massive.merukuru.org
3. Count number of unique rusers associated with a given rhost
4. Find all the rhost associated with Bernice.fakedomain.com

Sample log

Jun 14 15:16:01 combo sshd(pam\_unix)[19939]: authentication failure; logname= uid=0 euid=0 tty=NODEVssh ruser=Evelyn.fakedomain.com rhost=218.188.2.4

ruser would be Evelyn.fakedomain.com

rhost would be 218.188.2.4, note this does not have to be an IP