**Install Python, MRJob, and nano**

In this activity, we'll walk you through installing the "mrjob" package for MapReduce on the HDP Sandbox, which will be needed for subsequent activities in this course.

Because Cloudera has placed their own repositories behind a paywall now, and the underlying CentOS 7 operating system used in the sandbox image has reached EOL status, we need to adjust the sandbox's repositories to where they have been archived before we can install anything new. **Follow the steps below:**

Installing mrjob on HDP 2.65

First you need to connect to your running Hortonworks Sandbox HDP virtual machine from a terminal.

On Windows, you can use [PuTTY](https://putty.org/). Enter **maria\_dev@127.0.0.1** for the hostname, and **2222**for the port.

On Mac or Linux, open a terminal window and run ssh -p 2222 127.0.0.1

To log in, the password for maria\_dev is also **maria\_dev**.

You will now need to escalate your privileges in order to set things up. Enter:

su root

The default root password is **hadoop**. You will be prompted to change this.

Once you are successfully at the root level (you should see a # prompt instead of $), enter the following commands:

1. cd /etc/yum.repos.d
2. mkdir /etc/yum.repos.d/old
3. mv /etc/yum.repos.d/CentOS\*.repo /etc/yum.repos.d/old/
4. mv /etc/yum.repos.d/epel\*.repo /etc/yum.repos.d/old/
5. mv /etc/yum.repos.d/ambari\*.repo /etc/yum.repos.d/old/
6. mv /etc/yum.repos.d/hdp\*.repo /etc/yum.repos.d/old/
8. wget http://media.sundog-soft.com/hadoop/CentOS.repo
9. wget http://media.sundog-soft.com/hadoop/epel.repo
10. yum clean all
12. #NOTE! That's a lowercase L in ius-release-el7.rpm below, not the number 1
13. yum install -y https://repo.ius.io/ius-release-el7.rpm
15. rm ambari\*
16. yum check-update
18. yum install -y python-pip
19. pip install --trusted-host pypi.python.org pathlib
20. pip install --trusted-host pypi.python.org mrjob==0.7.4
21. pip install --trusted-host pypi.python.org PyYAML==5.4.1
22. yum install -y nano
24. cd /home/maria\_dev
25. wget http://media.sundog-soft.com/hadoop/RatingsBreakdown.py
26. wget http://media.sundog-soft.com/hadoop/ml-100k/u.data