**CS590BD Big Data Analytics & Apps**

**Lab 1**

**Report on Cloud era Installation and Map Reduce application "Word Count"**

**Task1 – Apps for Mobile Devices/Sensors**

**Team Members:**

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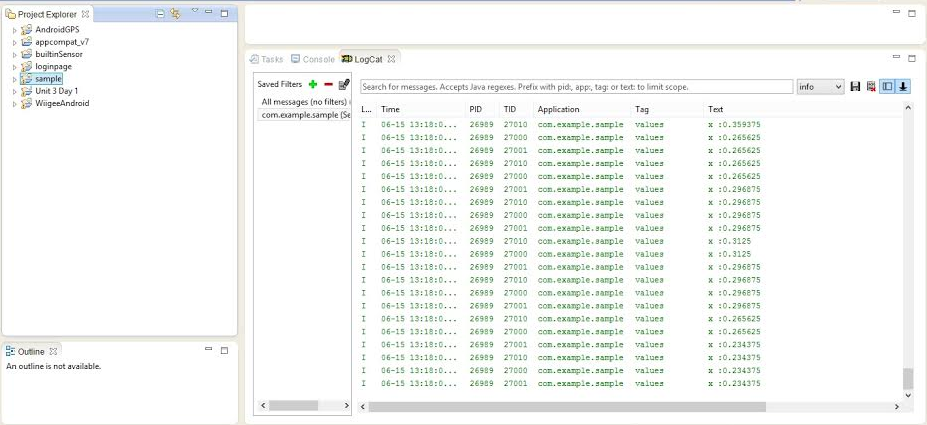
Prathyusha Dinne

Anudeep Vattipalli

Roopesh Utukuri

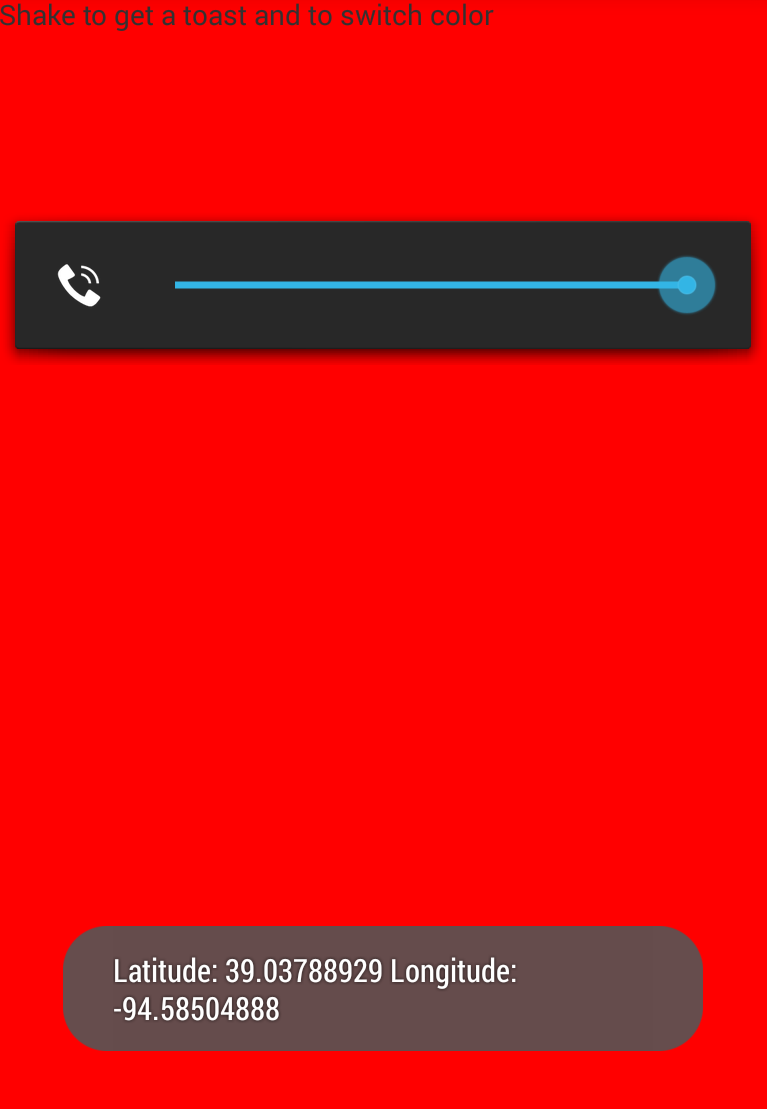
**Application 1 – Sensor Tag:**

When mobile user runs this app and moves sensor tag is moved rapidly it generate X,Y and Z coordinates of the tag. These coordinates are displayed in logcat.



**Application 2 - Android Motion Sensor:**

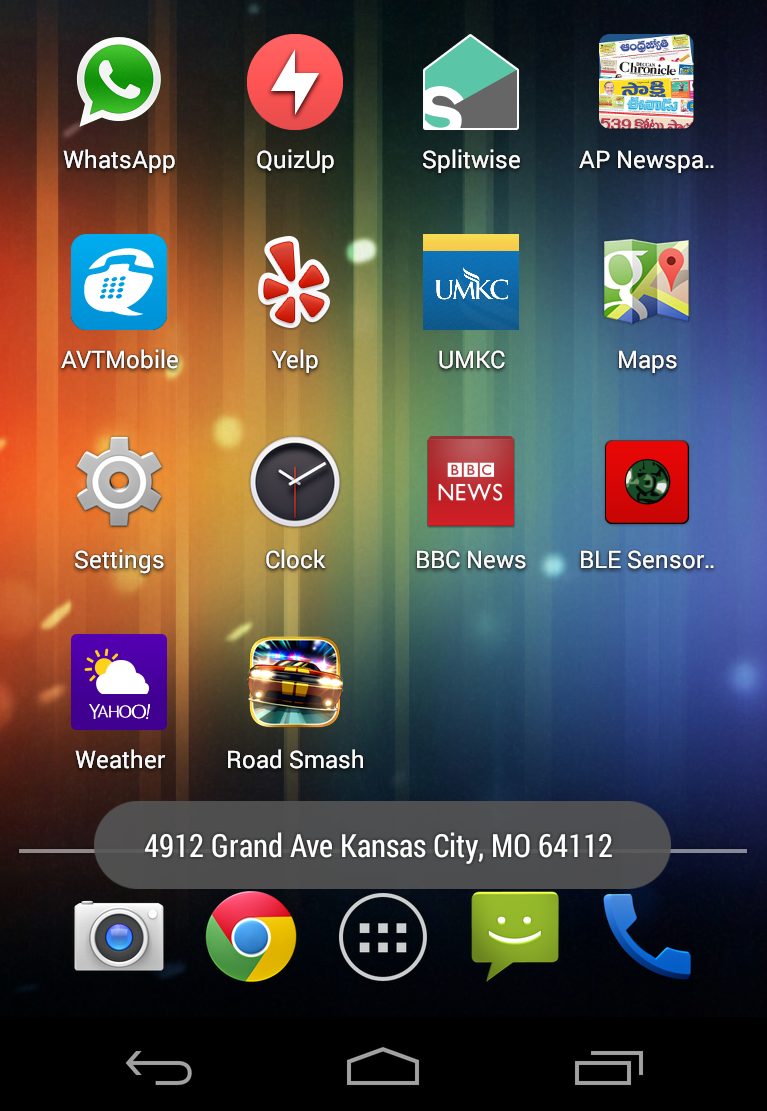
This app recognizes mobile motion and displays color according to its axis. It displays red and green color screens.

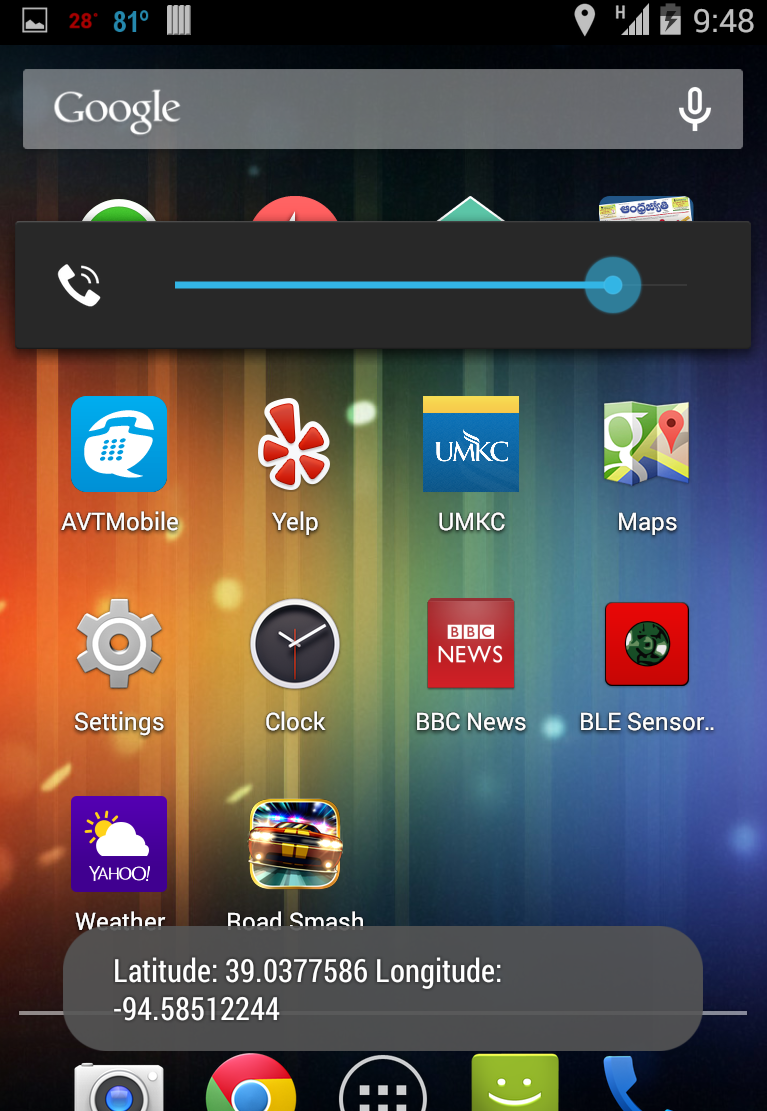




**Application 3 – Android GPS:**

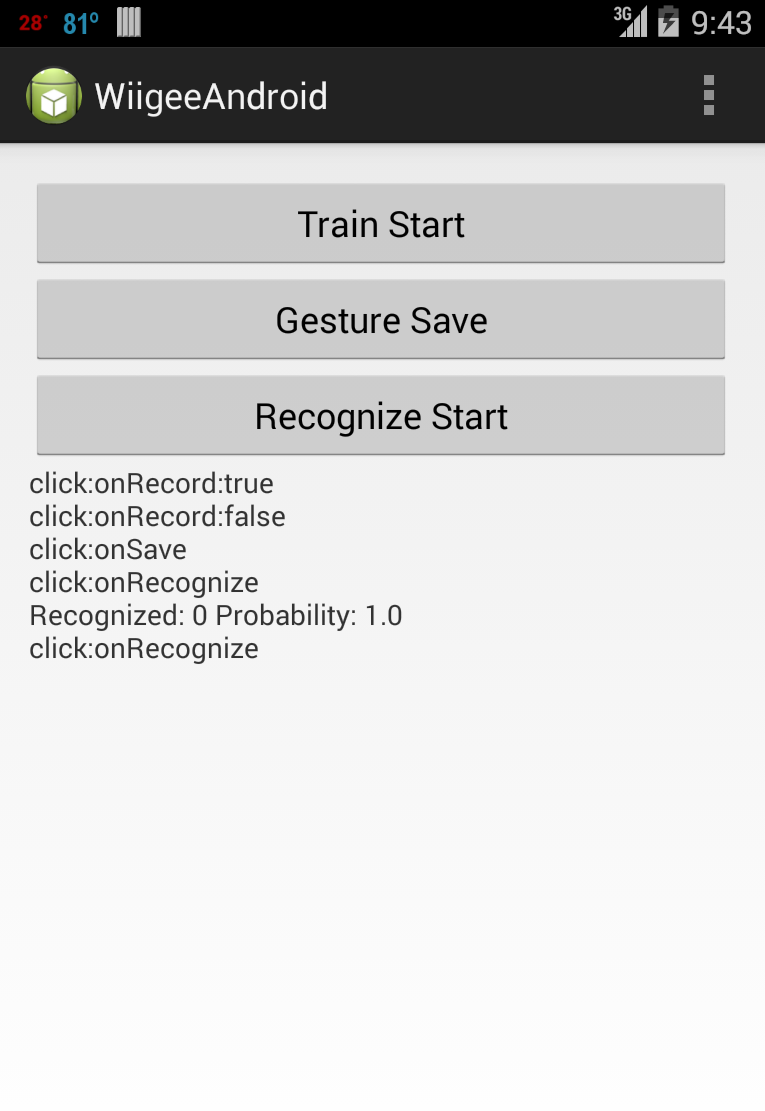
This application on successful run displays latitude & longitude location using the sensor tag and thus recognizes physical address of it. For this application to run, we had to install android 4.3 and above in SDK and also include google API in jar files.





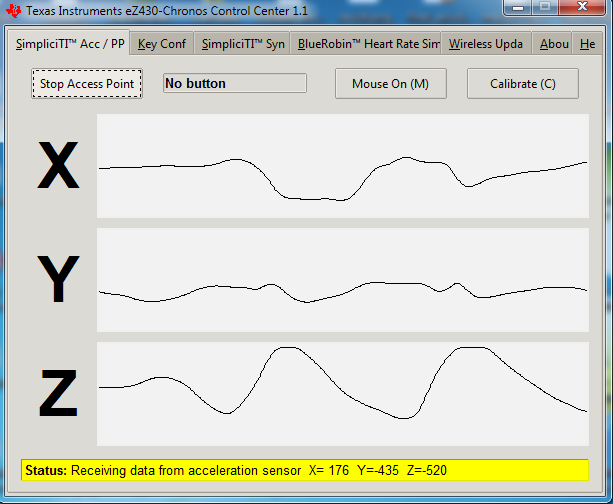
**Application 4 – Android Wigee:**

This application will ask user to recognize any gesture movement upon running mobile app and the user needs to save any particular gesture. After which through a component ‘gesture recognition’ user can perform any gesture movement and verify whether this gesture is same what he/she has saved using ‘save gesture’. If this gesture is same as the saved one, then a message probability 1.0 is displayed else 0.0. We need to remove pre included wigee jar file and private libraries.



**Application 5 – Chronos Watch:**

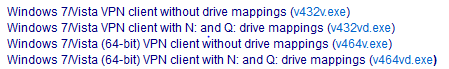
This app is basically a gaming interaction for the user. User need to wear this chronos watch and throw punches in the air. Total number of punches punched and the most power packed punch will be displayed to the user.



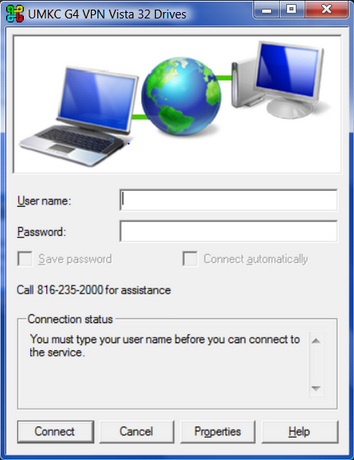
Task 2:

Sub Task 1: To access UMKC Cloudera servers

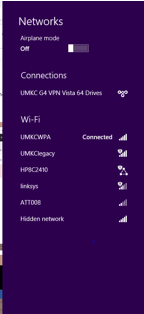
Initial step is to connect to UMKC VPN with credentials. For search for UMKC VPN and download the necessary exe file.



After installation the following screen appears where username and password are been asked for. Enter the details uname : sovd6 password : \*\*\*\*\*\* . click on connect.

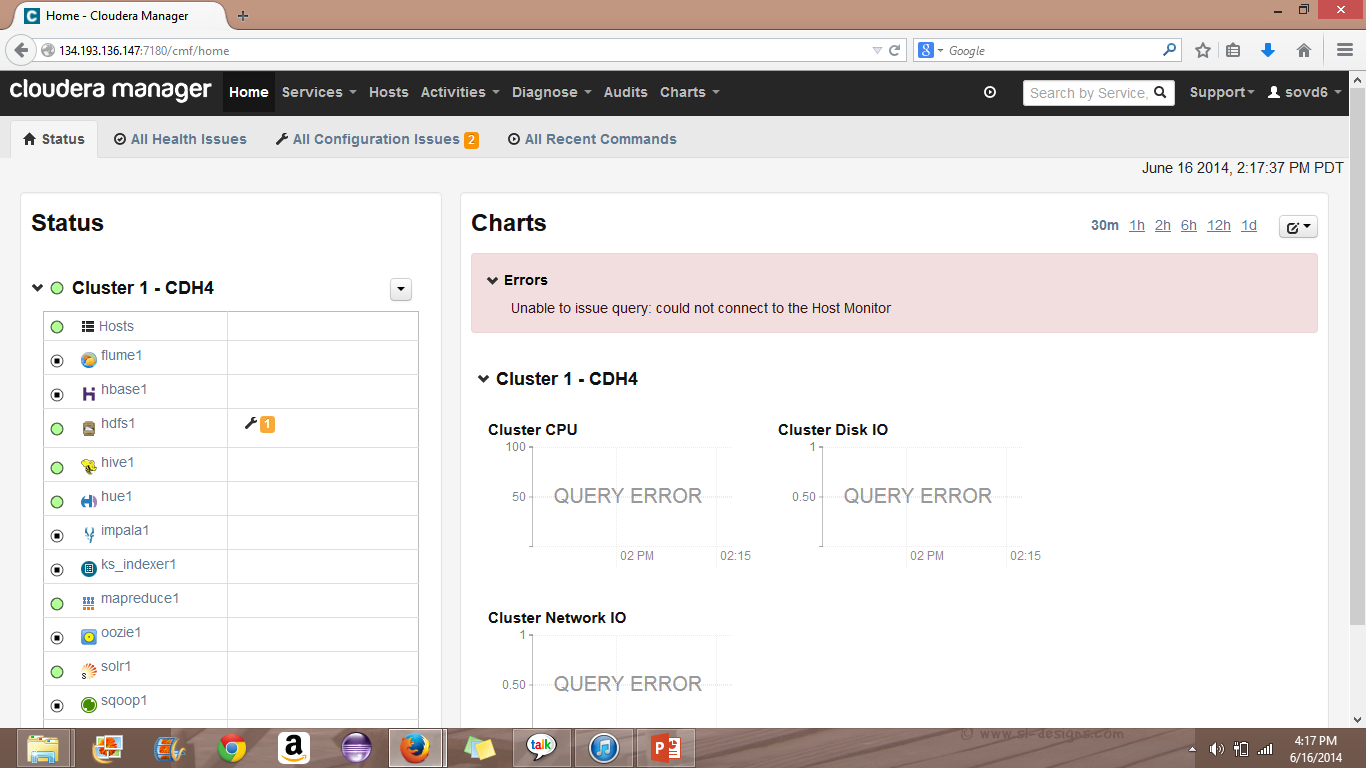


After connection has established a command prompt displays prompting to enter the sso id and pwd. We can successfully connect to the UMKC VPN.



Now click the url http://134.193.136.147:7180

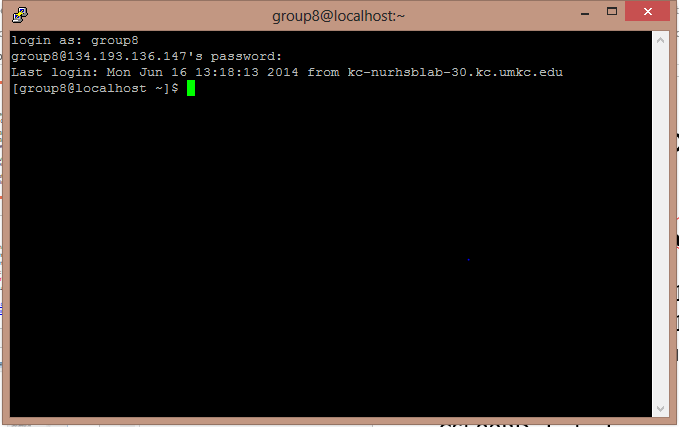
As my group is 8, I enter above link. my username and password as “sovd6”. Following will be displayed.



* Putty Installation from the link <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

And enter the Host IP as 134.193.136.147 ;port 22, click on login.

This following displays asking us to enter the login credentials. AS I belong to group 8 my credentials remain as “ group 8”



If needed we can change the password. But so as to avoid ambiguity with regard to the password we made our password to remain as the same.

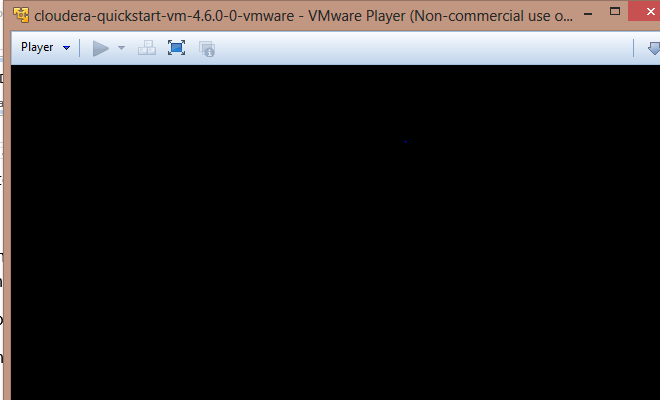
Subtask 2:

Install VMWare and Cloud era from respective sites. Next is opening cloudera from the vmware. Vmware is a collection of virtual environments may be set of computers, virtual softwares etc.

Change the bios settings in the boot mode of the system.

Here there is pretty chance of facing a challenge while choosing the image of the cloud era. That can be resolved as follows:

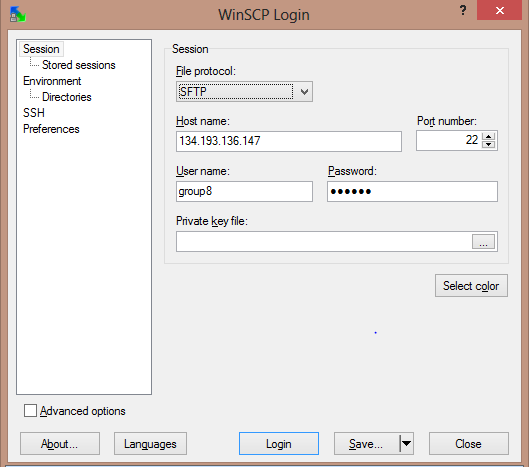
Click on the VMware player --- click on the cloudera-quickstart-vm (virtual machine configurartion) right click --settings--- CD/DVD(IDE)---uncheck auto detect--- choose next option and browse the disk file on the cloud era -quickstart-vm. Eventually save everything and open the cloud era successfully.

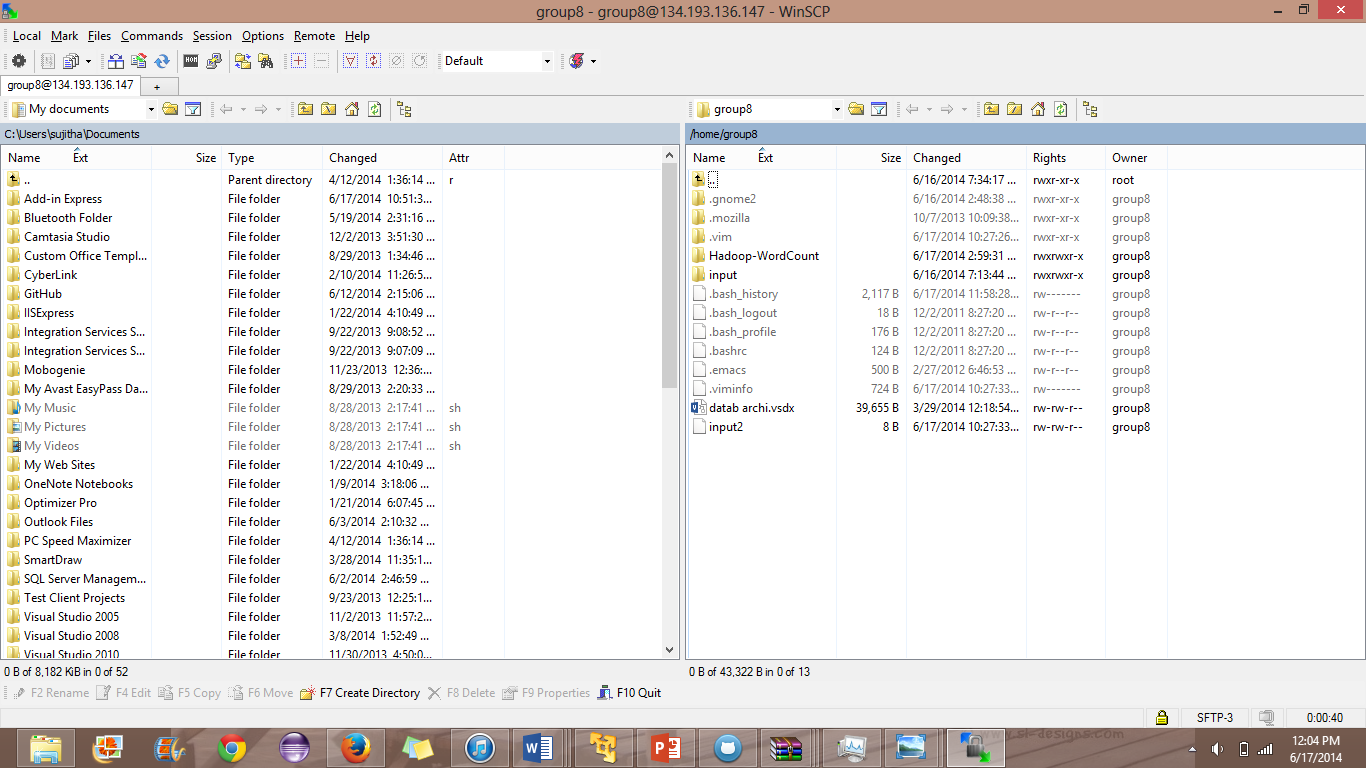


Finally you can login to needed visible links cloudera, hue etc.

Task: 3 Transfering files:

Next is the WINSCP. As I had it on my system I did not install it.

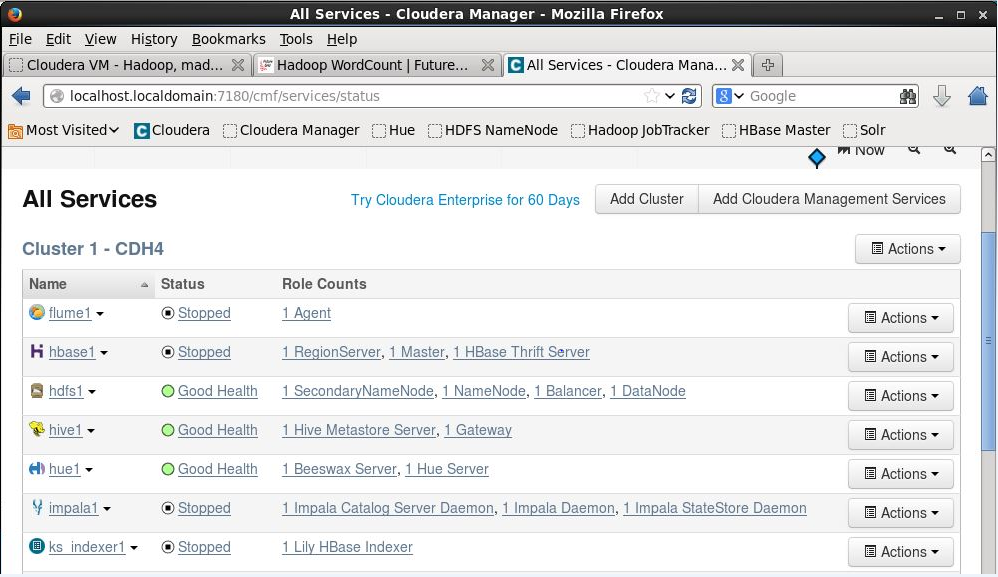


fie

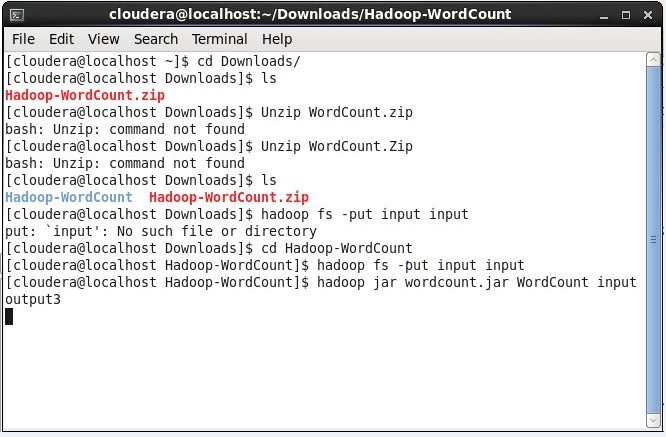
In the above screen I have transferred the file “datab archi.vsdx” as a sample. This is a file residing on my local machine and I could finally see it on my virtual machine.

Task 4: “Word Count”

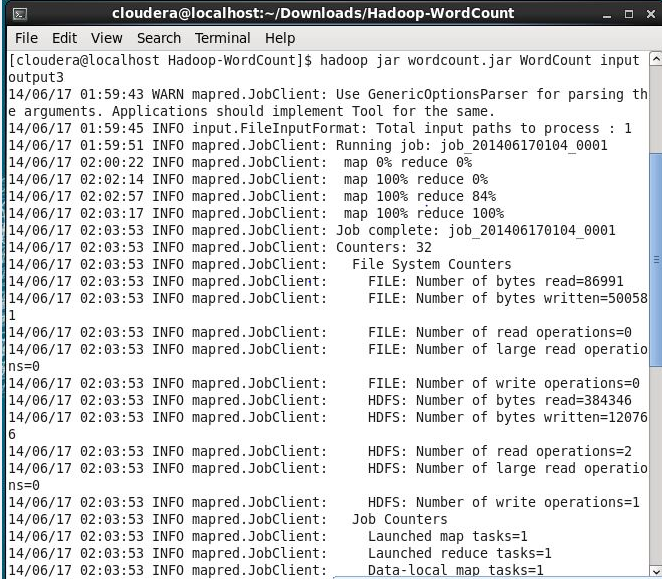
Download word Count file from the link on to the virtual machine.

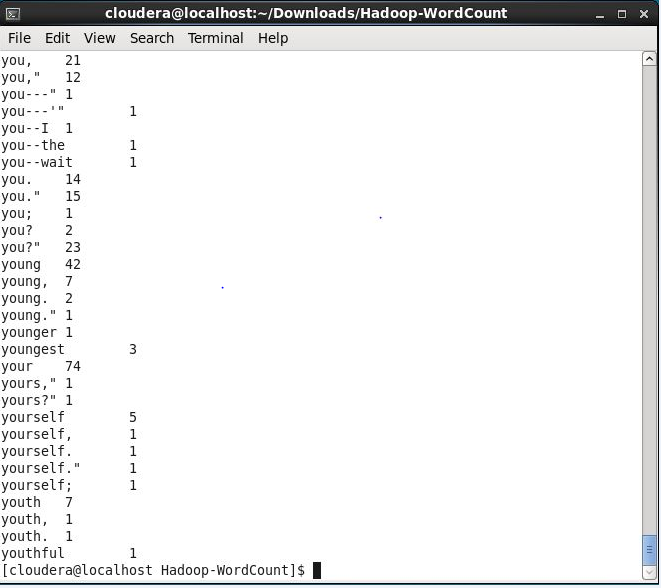


Above screen explains the conditions of the softwares.



UnZIp the wordcount and put it In the Hadoop with the corresponding command as shown in the above screen. Navigate into the Hadoop-wordcount and give the commenad Hadoop jar wordcount.jar wourdcount input output3.





Final out put is as shown above.

Task 5: Creating a jar file:

Open eclipse, import the word count project into the workbench.

Export it with the export functionality that is available in the eclipse. Select the main class with out fail.

Task 3:

Github uname: [sovd6@mail.umkc.edu](mailto:sovd6@mail.umkc.edu)

Scrumdo: [sujithaonteru@gmail.com](mailto:sujithaonteru@gmail.com)