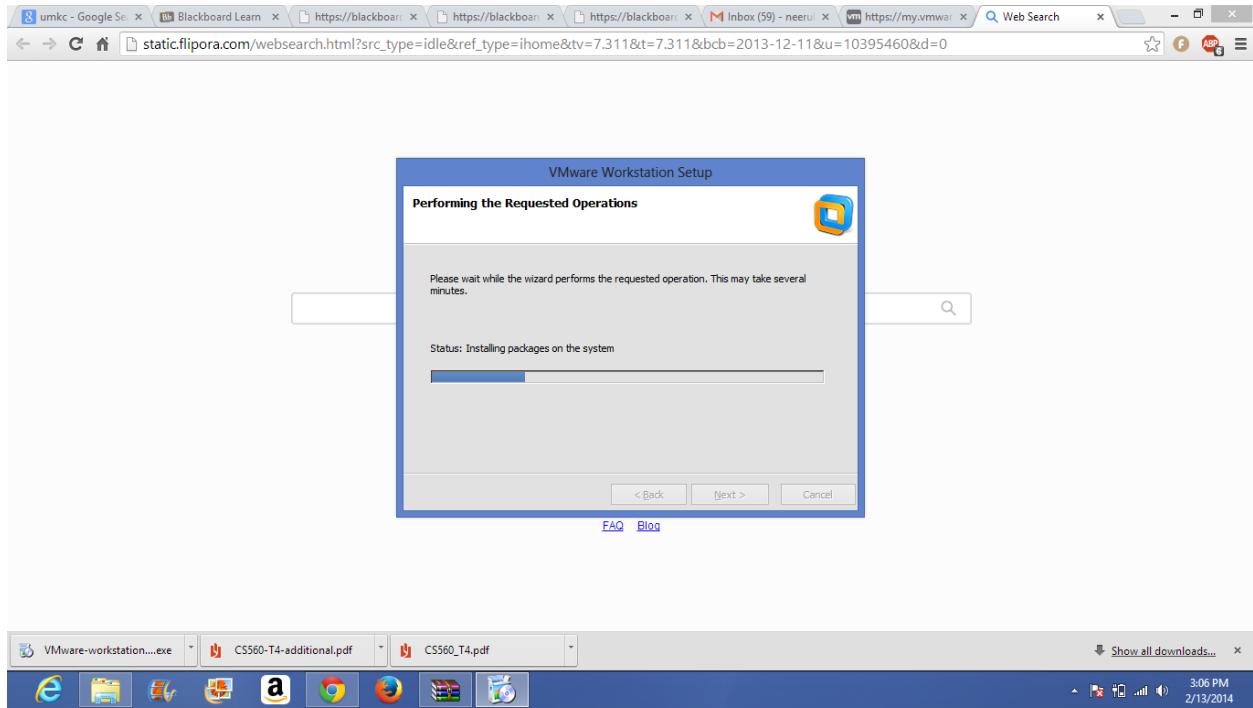


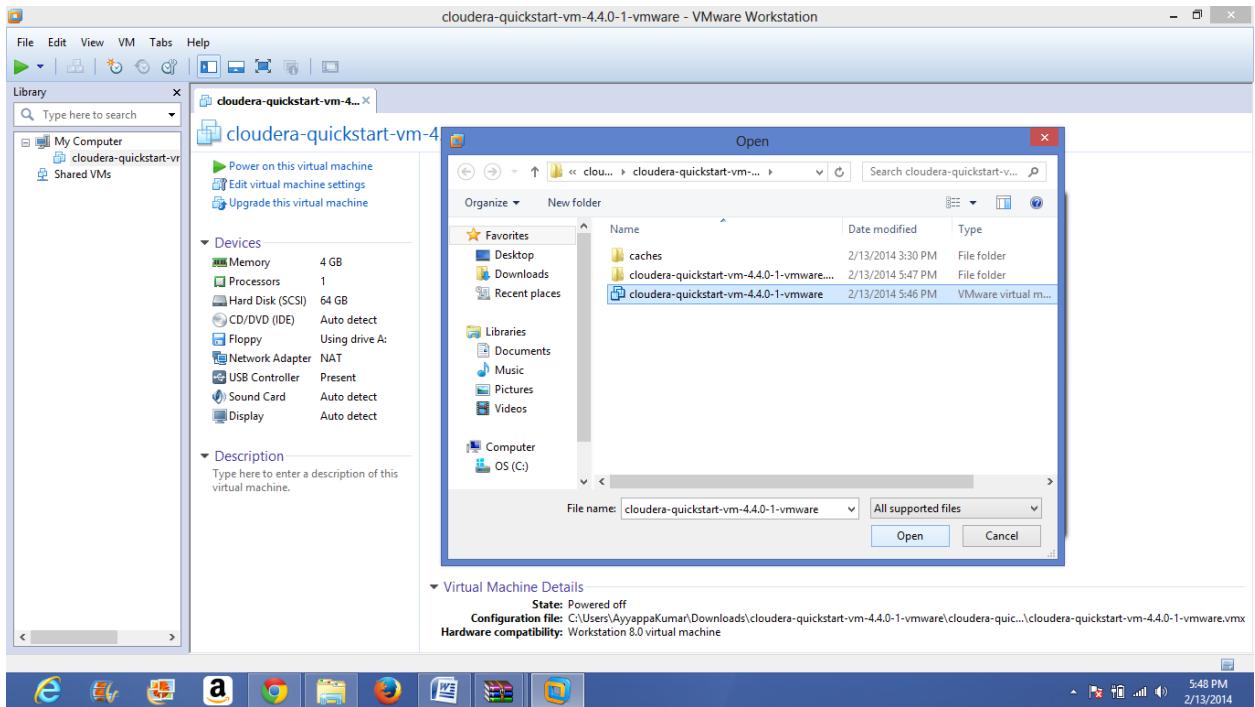
## N.AYYAPPA KUMAR(16157522)

### KDM LAB-3

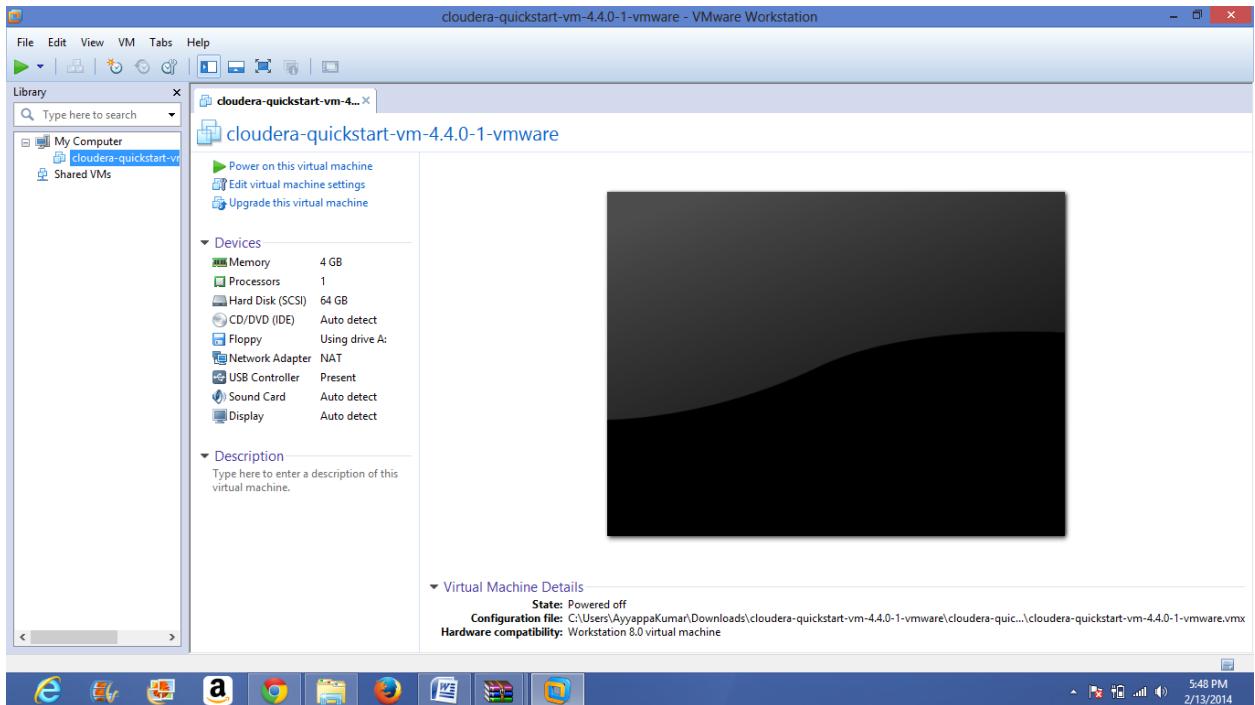
In order to complete the tasks assigned in lab-3 assignment first of all download the cloudera image from the provided URL In addition to this Install VMware in your systems. below figure represents the installation process of VMware.



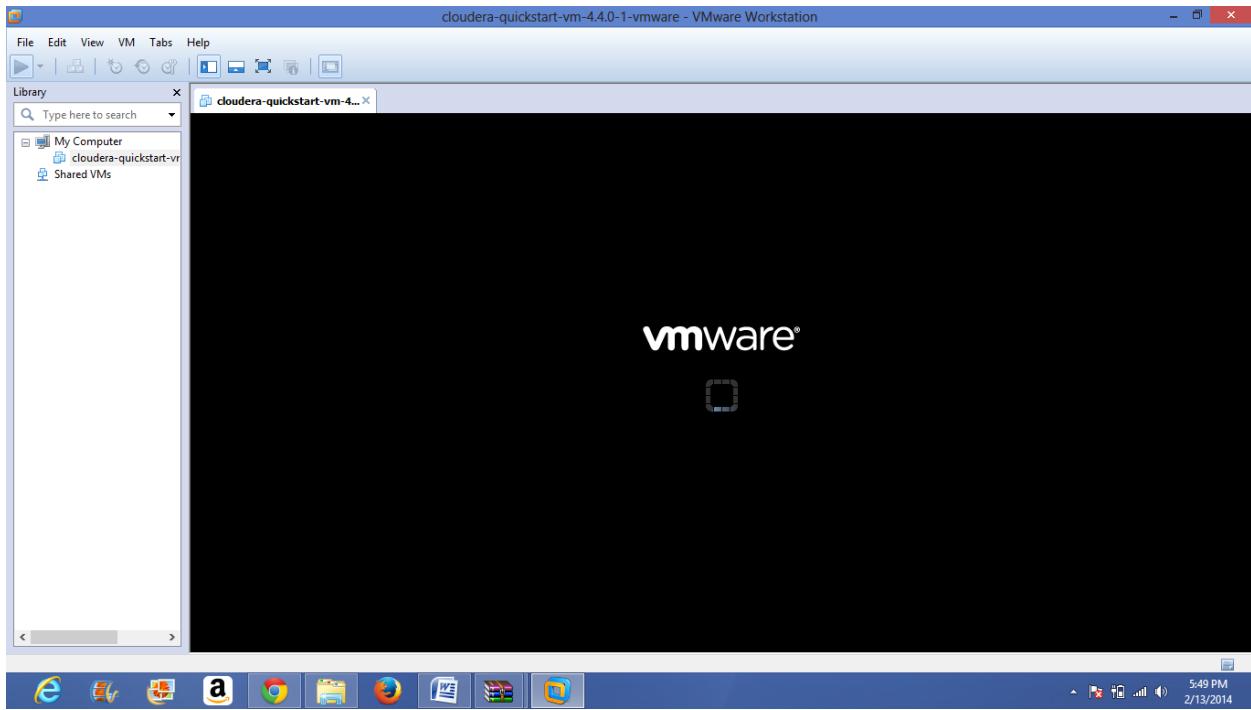
Then open the cloudera image in VMware.



After opening the machine click on power on this virtual machine. Mean While you have to use the login details like username and password as cloudera.



Then the image gets initialized as shown in below following two figures.



There are some features already initialized in firefox , you can see them in below figure.

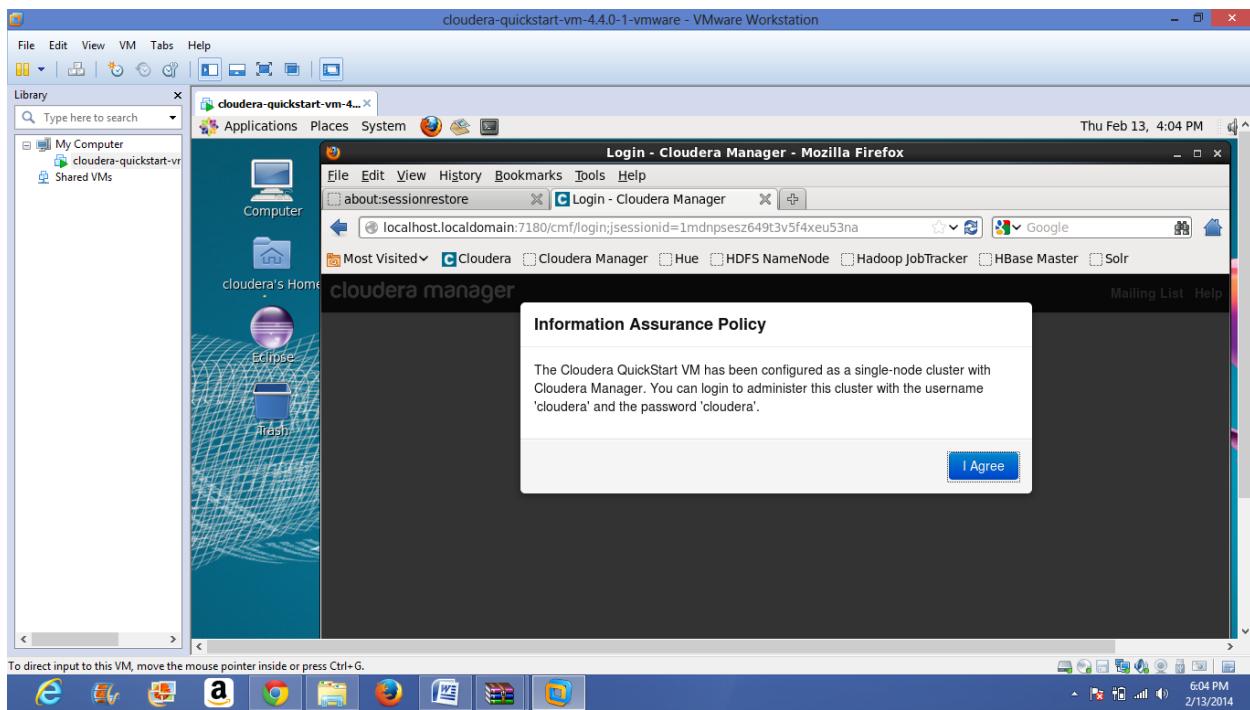


Then click on any any option like cloudera, cloudera manager etc.

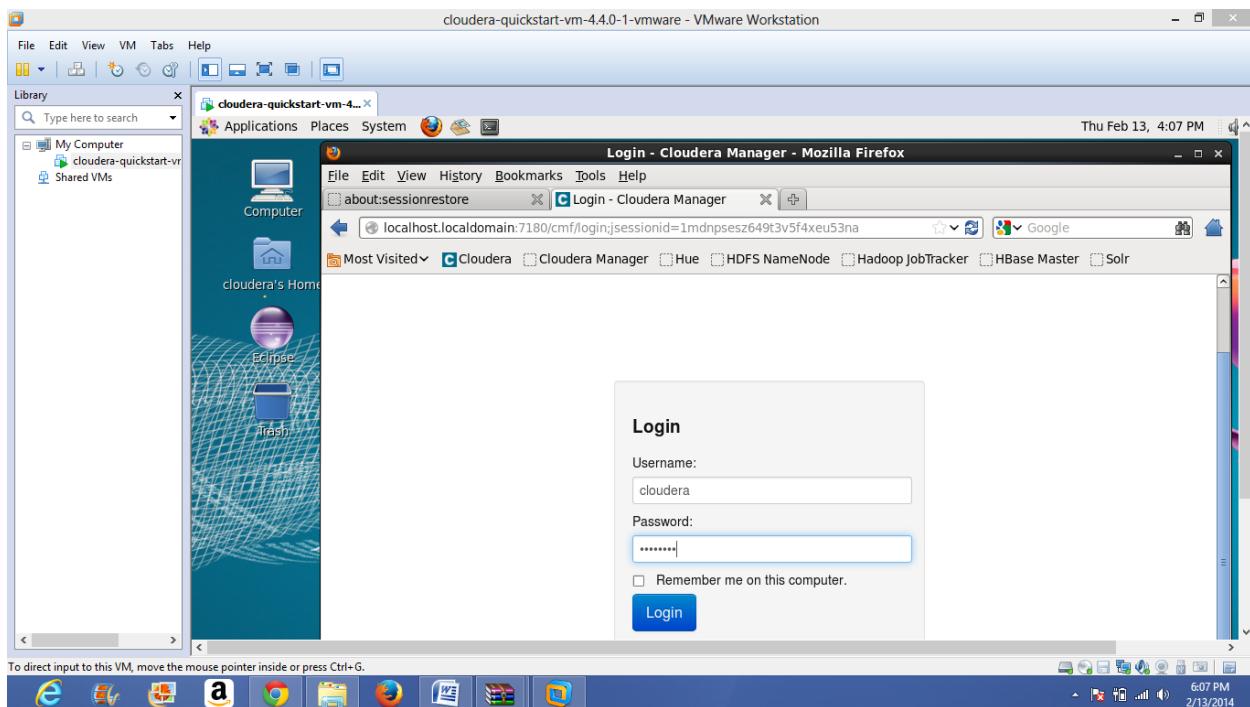


you have to login into cloudera by using both username and password as cloudera.

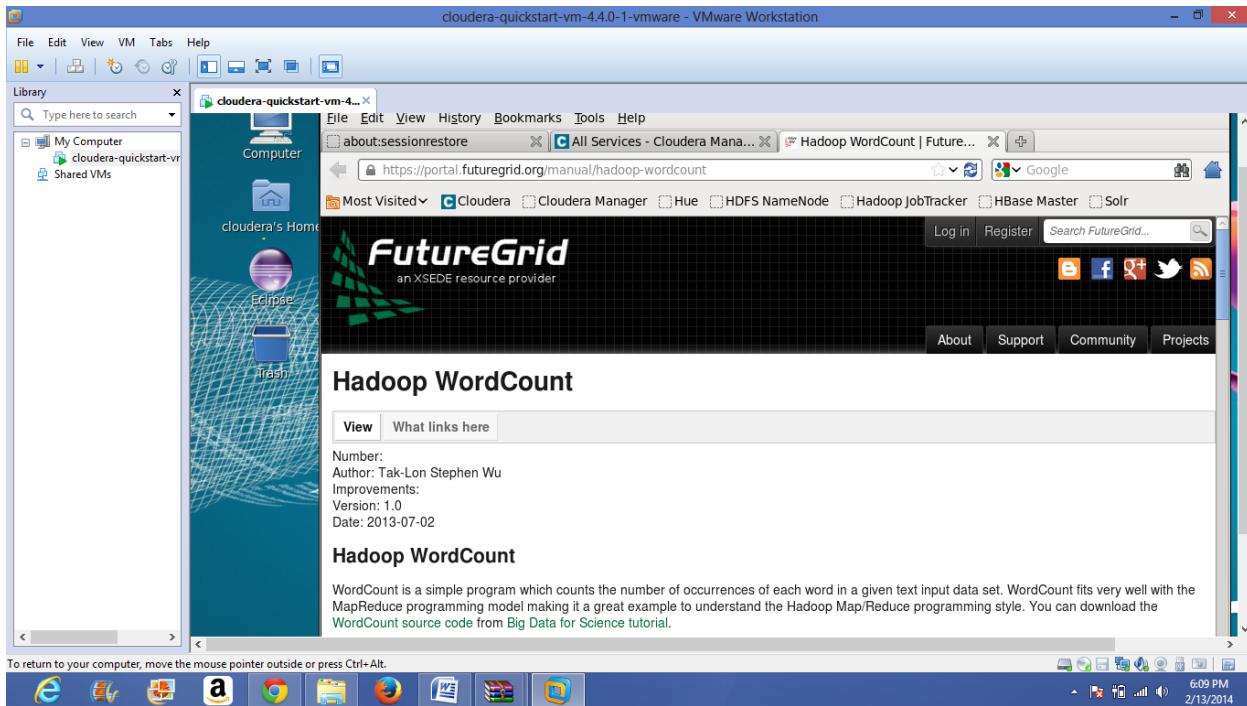




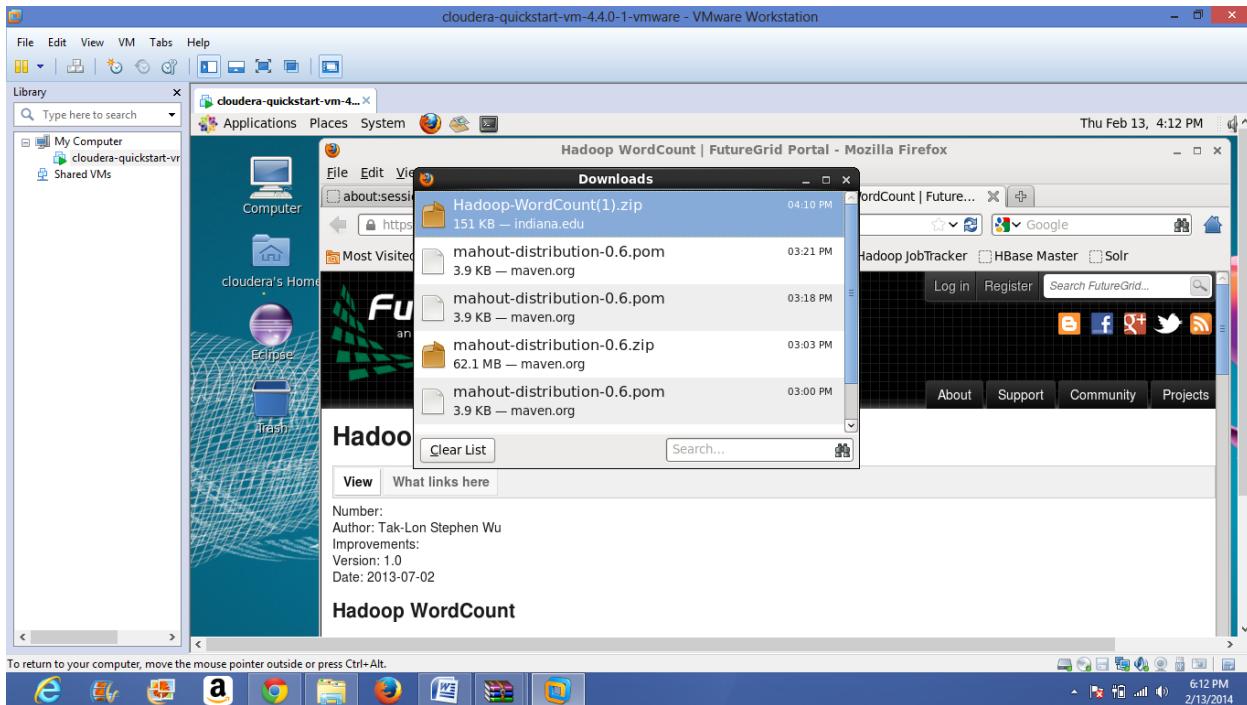
For cloudera manager also use both username and password as cloudera.

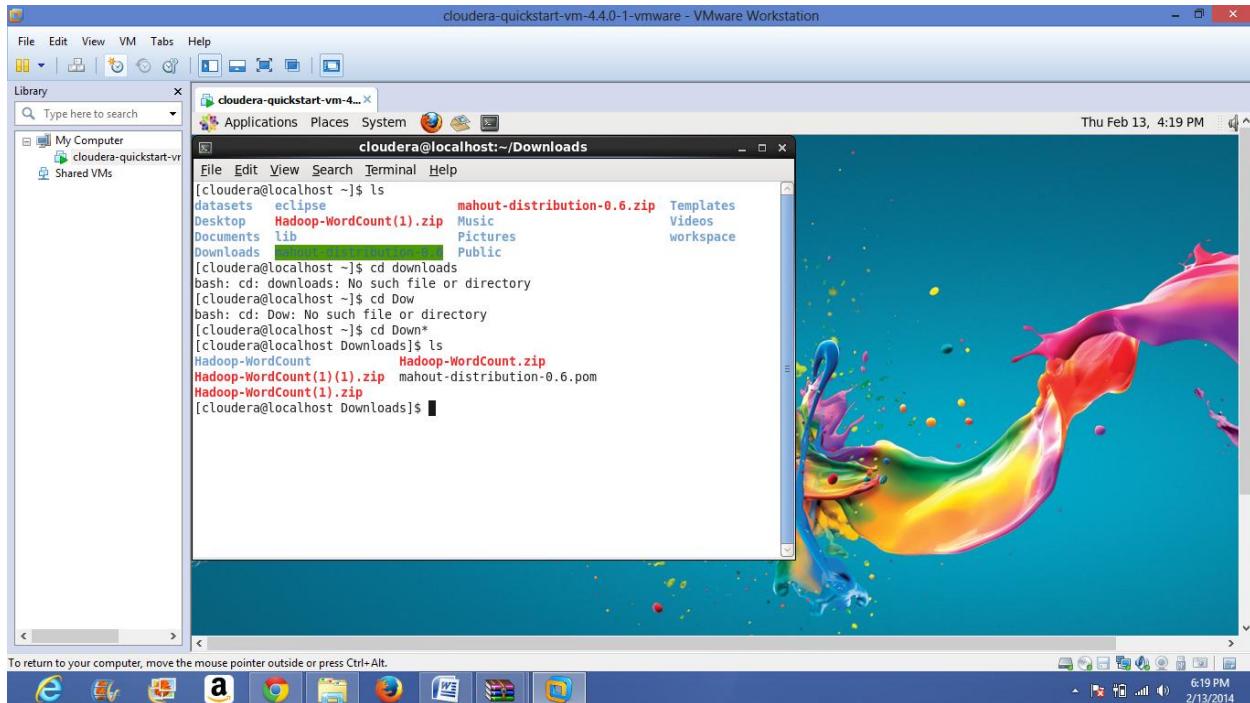
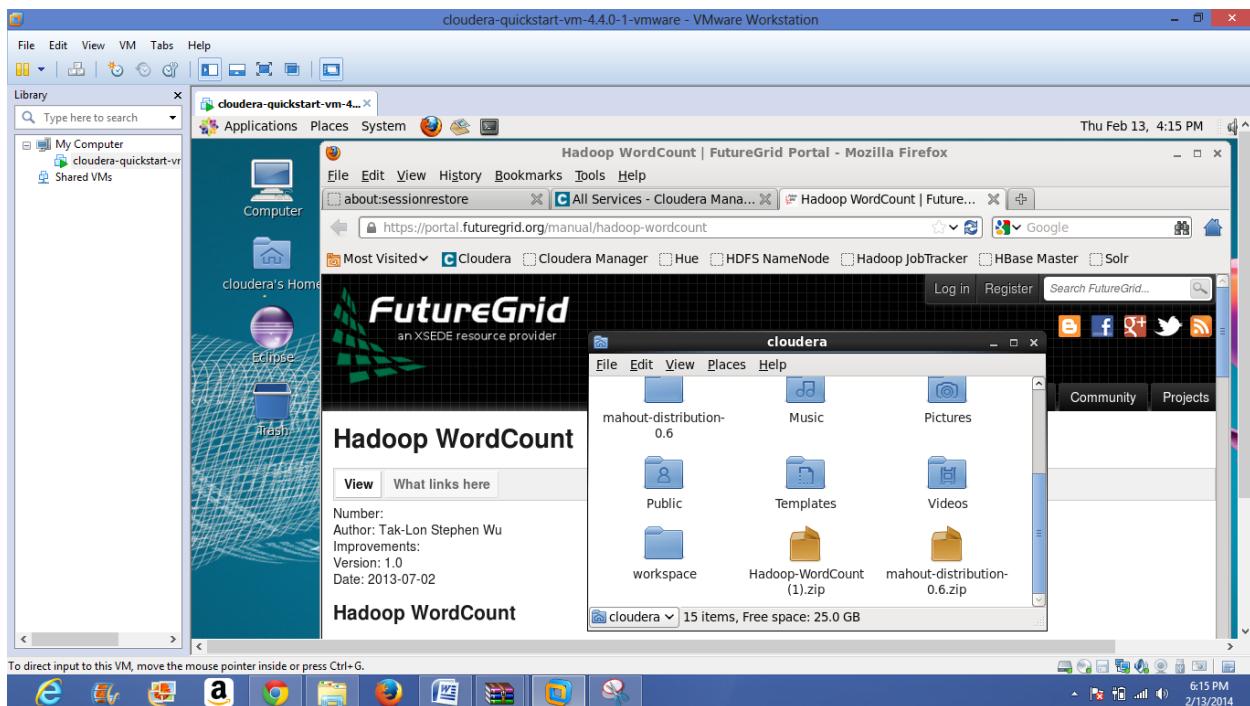


Then download word count example from the link <https://portal.futuregrid.org/manual/hadoop-wordcount> in firefox.

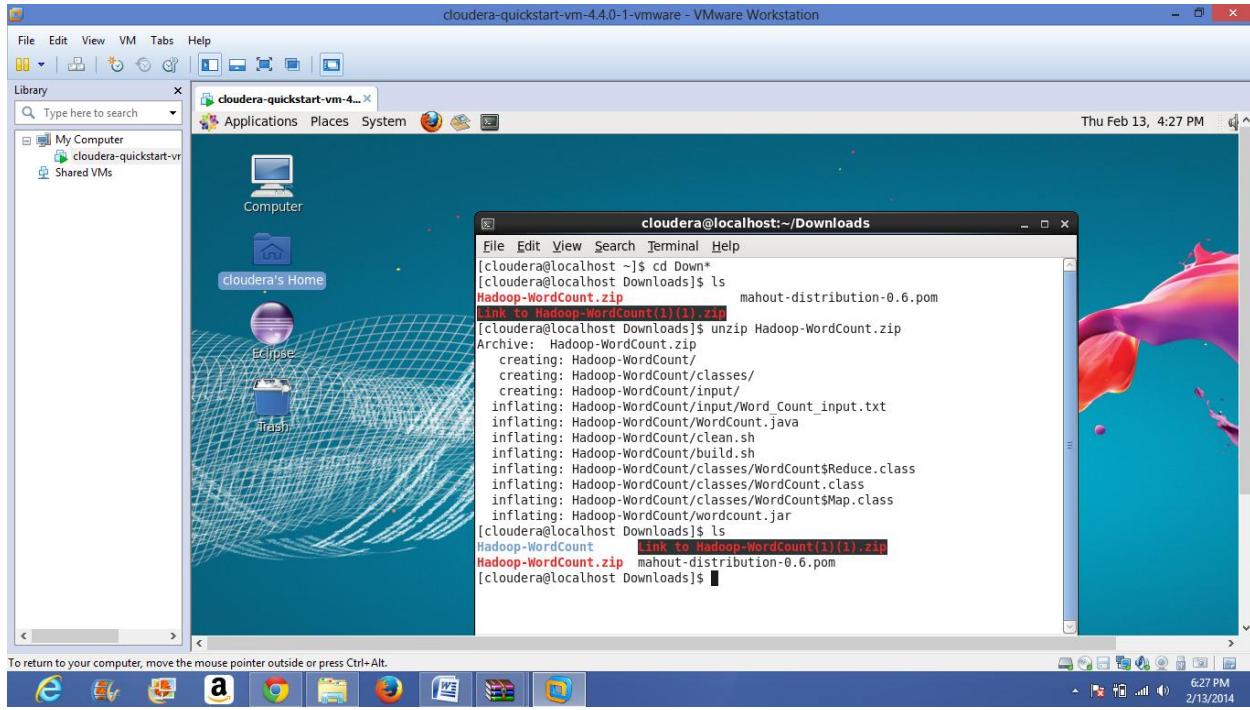


then the download completion of word count example is shown in below figure.



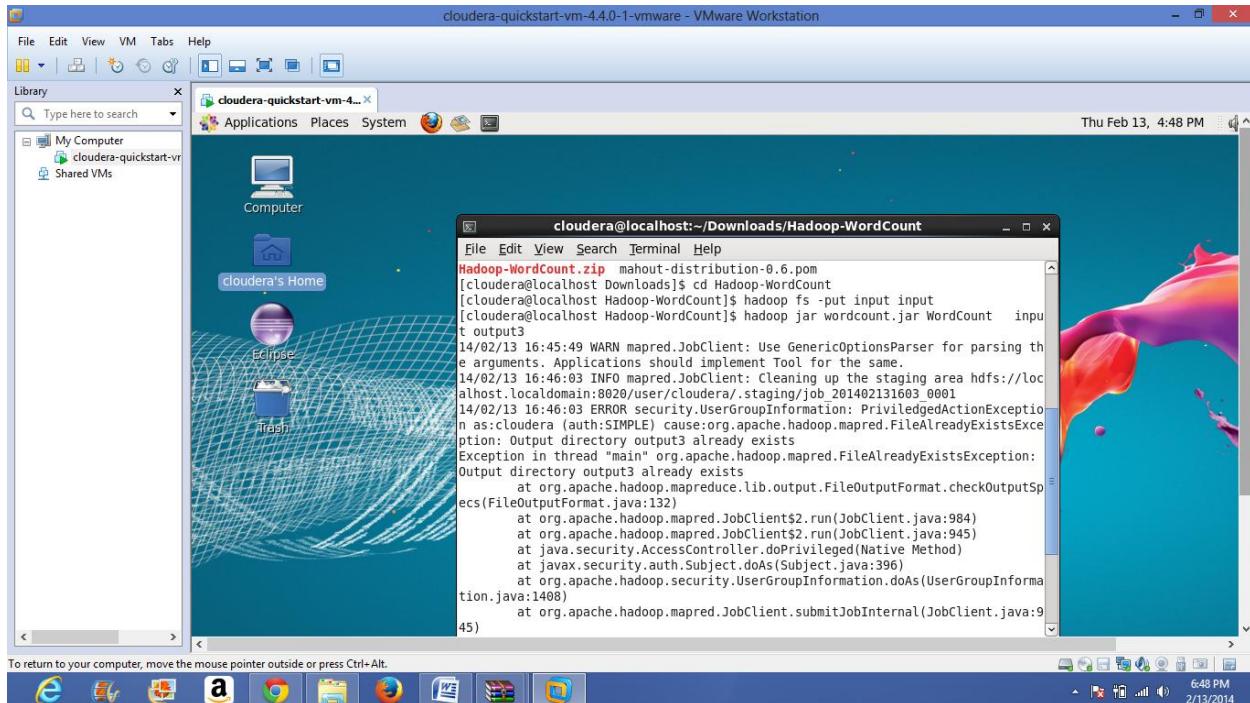


Then unzip the wordcount.zip and go to word count folder for this use command like cd wordcount.

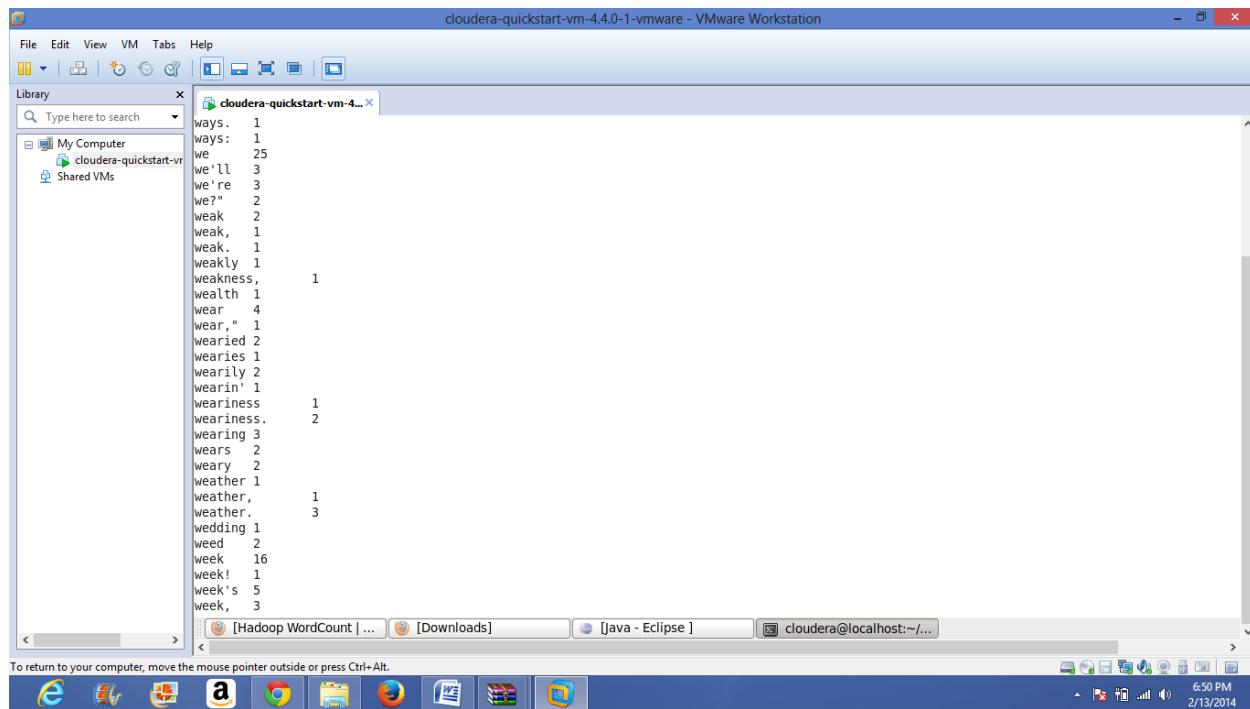


Then apply the commands

hadoop fs -put input input      hadoop jar wordcount.jar WordCount input output3



view the result from output3 by using command hadoop fs -cat output3/\*



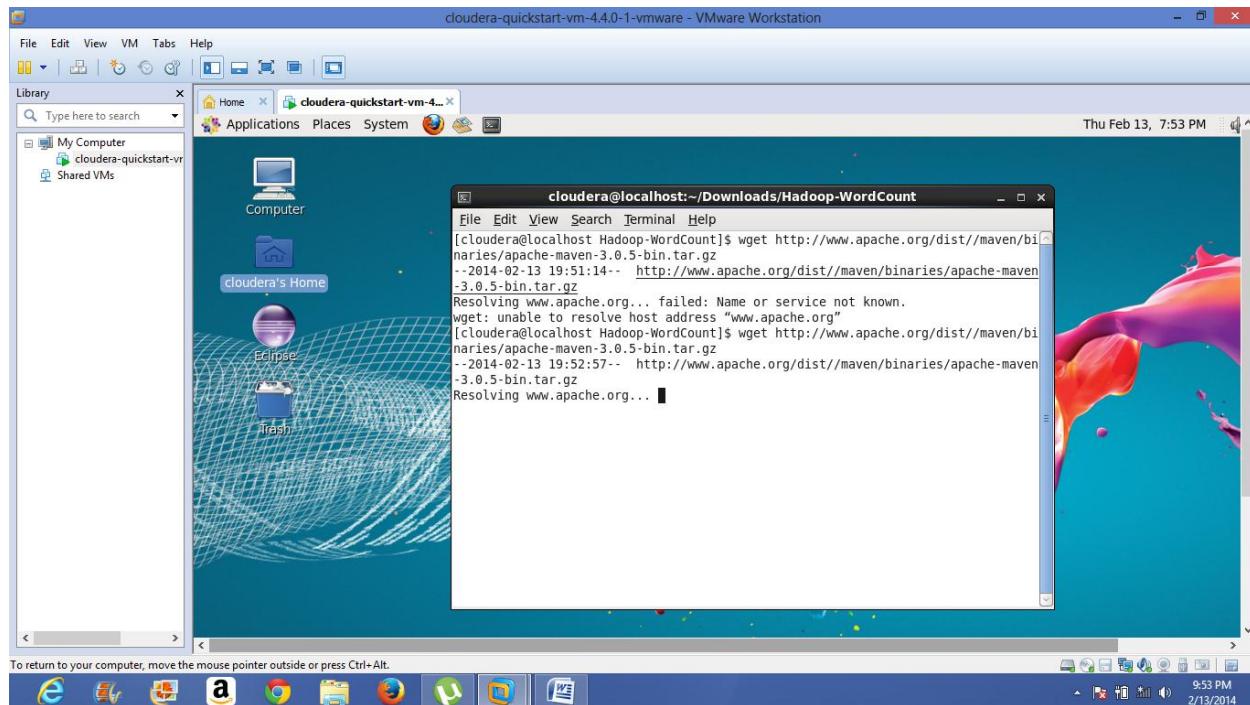
```
cloudera-quickstart-vm-4.0.1-vmware - VMware Workstation
File Edit View VM Tabs Help
Library Type here to search
My Computer cloudera-quickstart-v...
Shared VMS
cloudera-quickstart-vm-4... x
ways. 1
ways: 1
we 25
we'll 3
we're 3
we?" 2
weak 2
weak, 1
weak. 1
weakly 1
weakness, 1
wealth 1
wear 4
wear," 1
wearied 2
wearies 1
wearily 2
wearin' 1
weariness 1
weariness. 2
wearing 3
wears 2
weary 2
weather 1
weather, 1
weather. 3
wedding 1
weed 2
week 16
week! 1
week's 5
week, 3
[Hadoop WordCount | ...] [Downloads] [Java - Eclipse] cloudera@localhost:~/...
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Eclipse a chrome firefox ms word ms powerpoint outlook 6:50 PM 2/13/2014
```

The screenshot shows a VMware Workstation window titled "cloudera-quickstart-vm-4.0.1-vmware - VMware Workstation". Inside, a terminal window titled "cloudera@localhost:~/..." displays the output of a Hadoop WordCount job. The output lists words and their counts:

```
ways. 1
ways: 1
we 25
we'll 3
we're 3
we?" 2
weak 2
weak, 1
weak. 1
weakly 1
weakness, 1
wealth 1
wear 4
wear," 1
wearied 2
wearies 1
wearily 2
wearin' 1
weariness 1
weariness. 2
wearing 3
wears 2
weary 2
weather 1
weather, 1
weather. 3
wedding 1
weed 2
week 16
week! 1
week's 5
week, 3
```

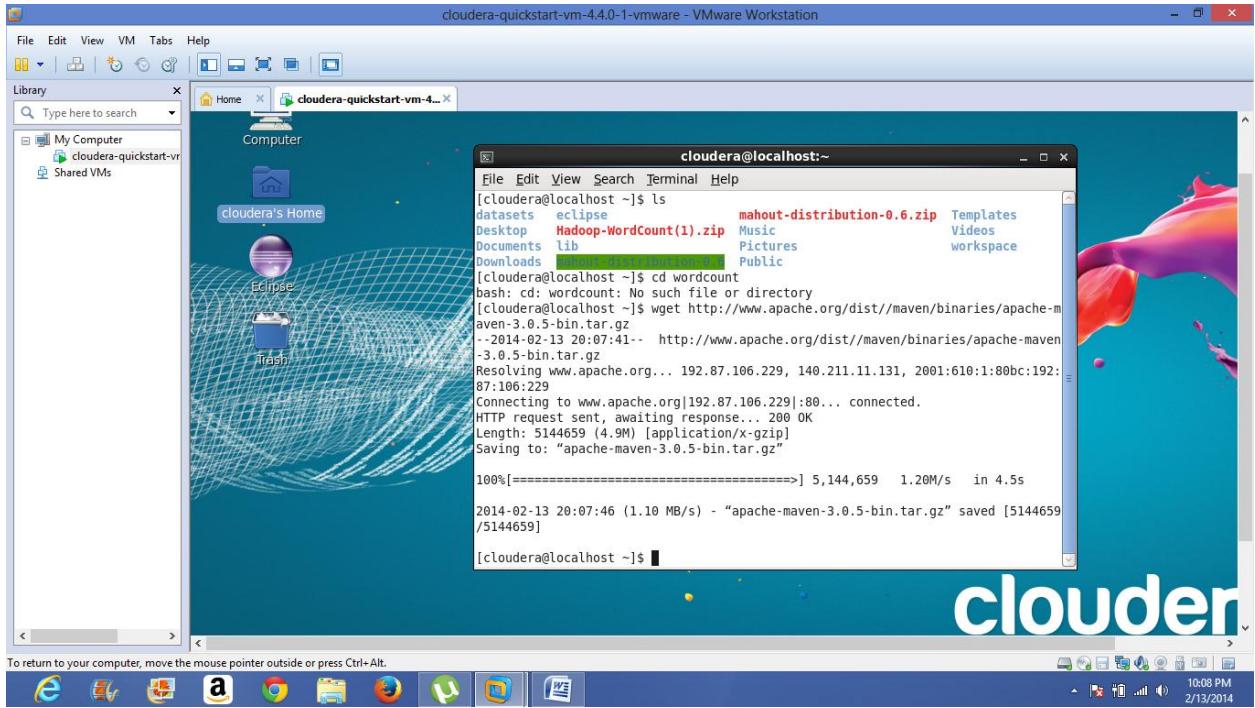
## Install Mahout:

Download Maven 3.0.5 by using wget <http://www.apache.org/dist//maven/binaries/apache-maven-3.0.5-bin.tar.gz> command

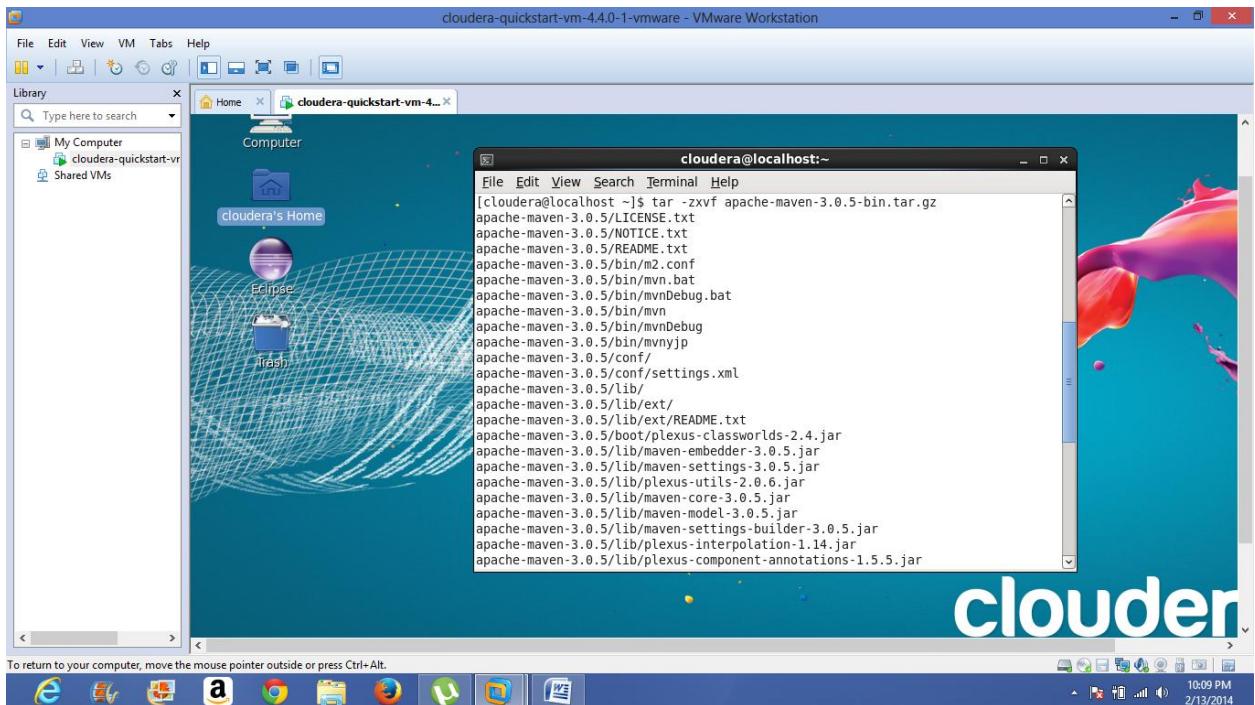


```
cloudera-quickstart-vm-4.0.1-vmware - VMware Workstation
File Edit View VM Tabs Help
Library Type here to search
My Computer cloudera-quickstart-v...
Shared VMS
cloudera-quickstart-vm-4... x
Applications Places System Thu Feb 13, 7:53 PM
cloudera@localhost:~/Downloads/Hadoop-WordCount
File Edit View Search Terminal Help
[cloudera@localhost Hadoop-WordCount]$ wget http://www.apache.org/dist//maven/binaries/apache-maven-3.0.5-bin.tar.gz
--2014-02-13 19:51:14-- http://www.apache.org/dist//maven/binaries/apache-maven-3.0.5-bin.tar.gz
Resolving www.apache.org... failed: Name or service not known.
wget: unable to resolve host address "www.apache.org"
[cloudera@localhost Hadoop-WordCount]$ wget http://www.apache.org/dist//maven/binaries/apache-maven-3.0.5-bin.tar.gz
--2014-02-13 19:52:57-- http://www.apache.org/dist//maven/binaries/apache-maven-3.0.5-bin.tar.gz
Resolving www.apache.org...
Eclipse a chrome firefox ms word ms powerpoint outlook 9:53 PM 2/13/2014
```

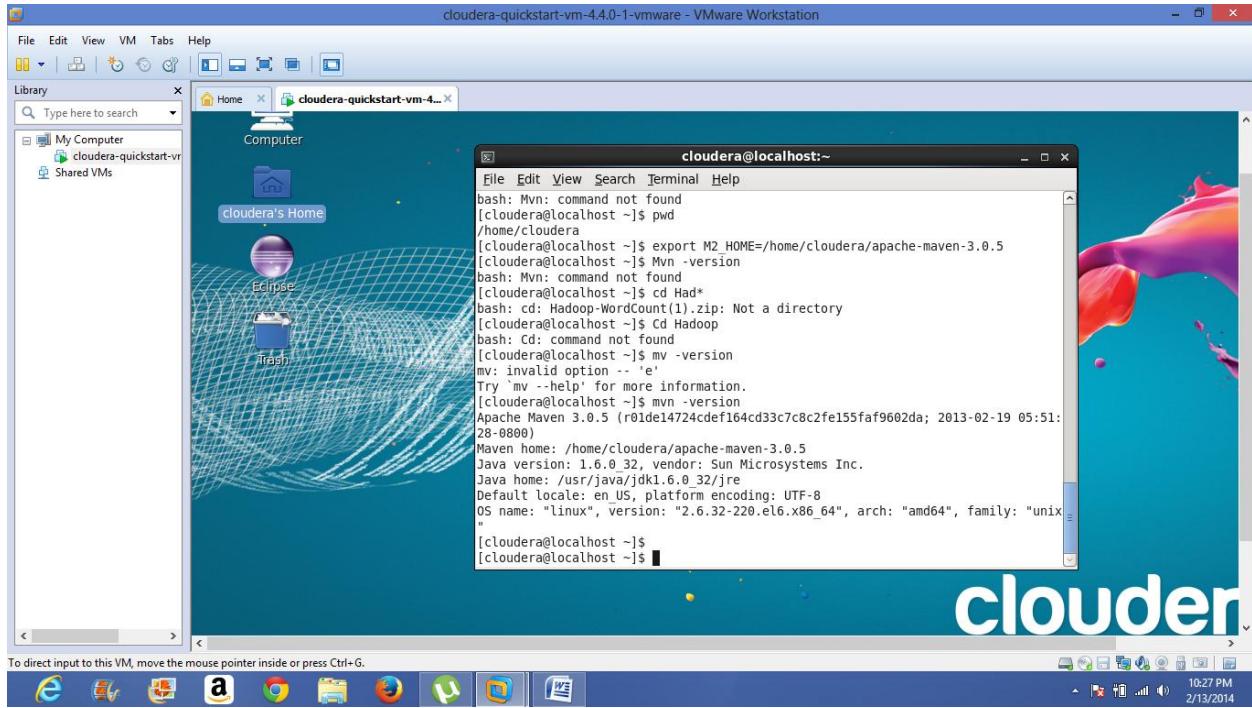
The screenshot shows a VMware Workstation window titled "cloudera-quickstart-vm-4.0.1-vmware - VMware Workstation". Inside, a terminal window titled "cloudera@localhost:~/Downloads/Hadoop-WordCount" runs the command "wget http://www.apache.org/dist//maven/binaries/apache-maven-3.0.5-bin.tar.gz". The output shows an error because the host "www.apache.org" cannot be resolved.



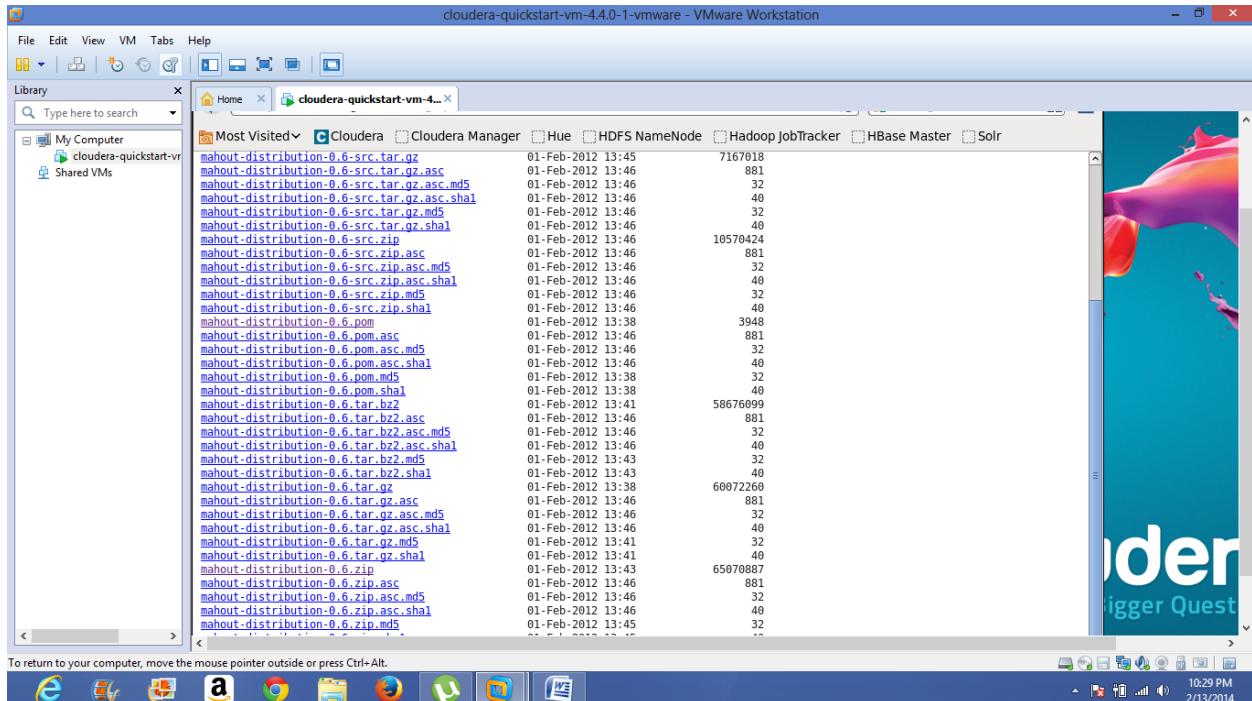
## Extract archive



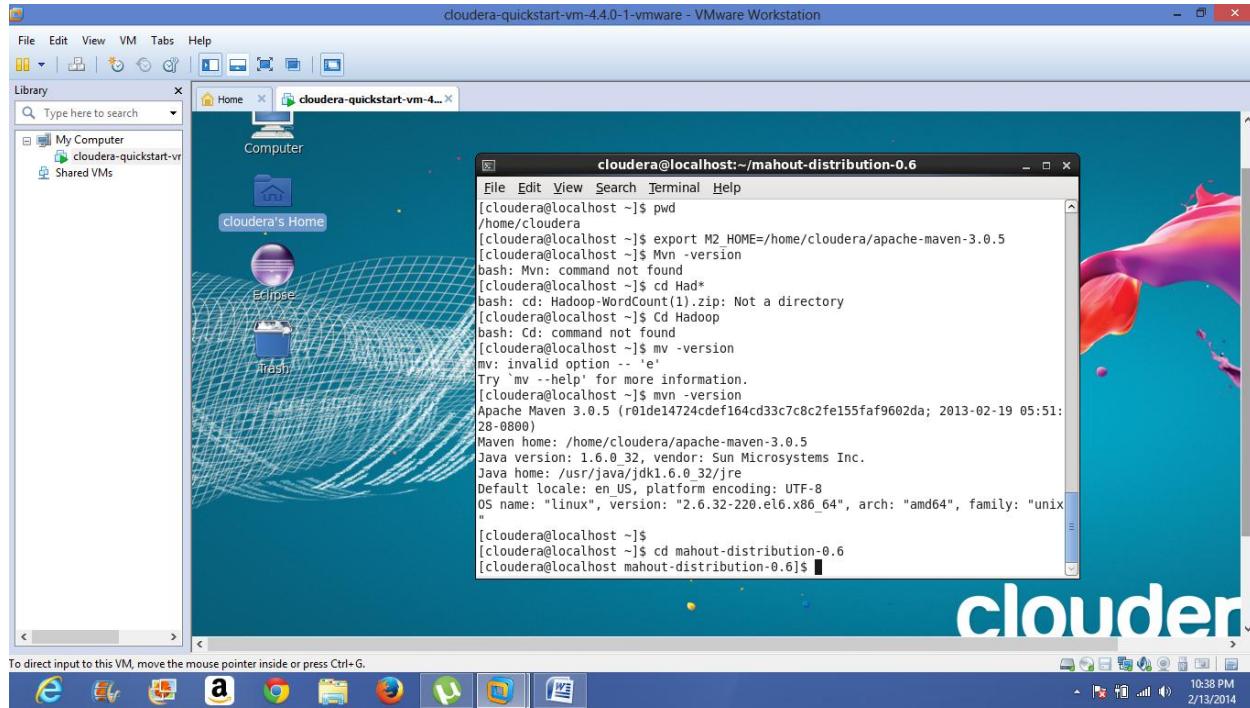
Here we have to add M2\_HOME and PATH. And then check maven version by using mvn -version.



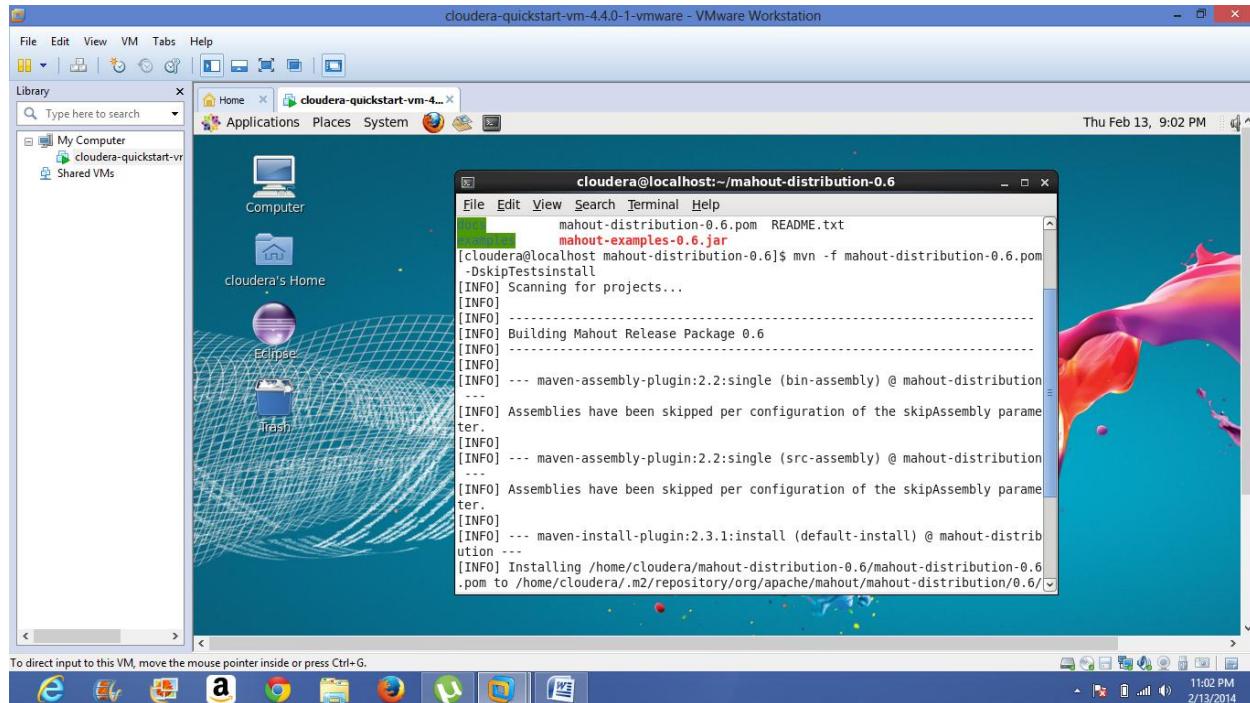
download mahout0.6, both mahout-distribution-0.6.pom as well as mahout-distribution-0.6.zip



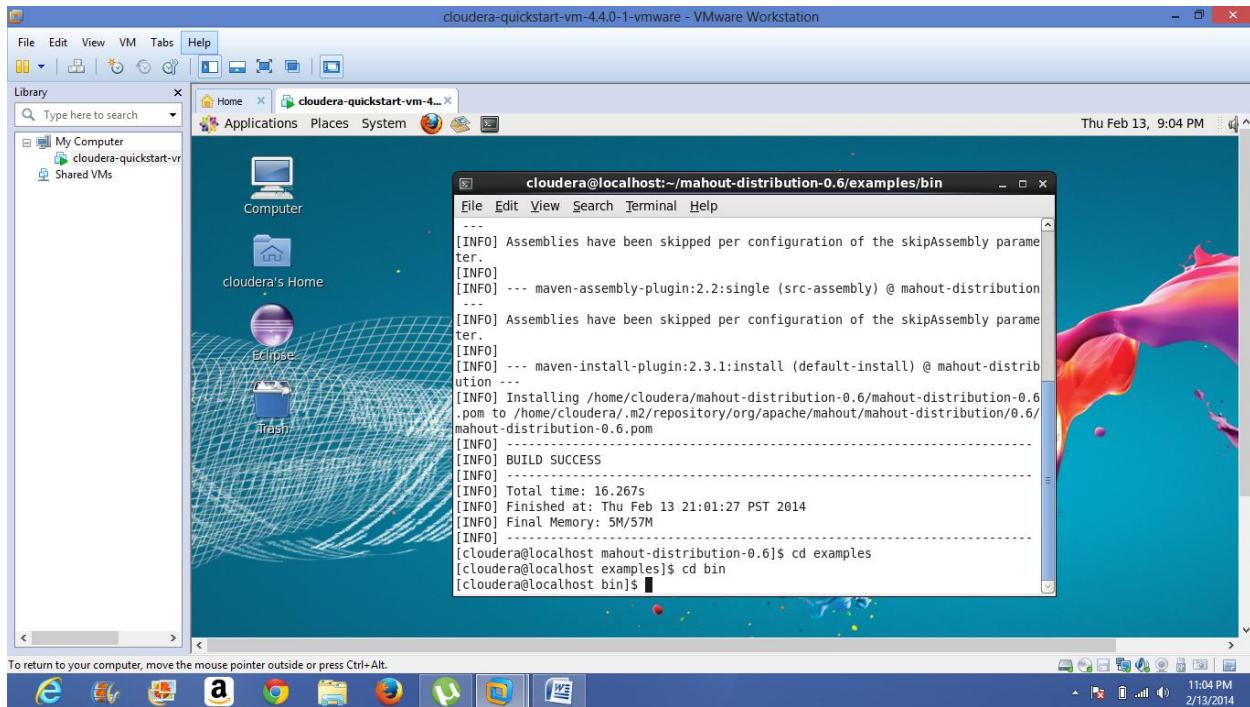
unzip the zip file and go to mahout-distribution-0.6. then move the pom file to mahout-distribution-0.6



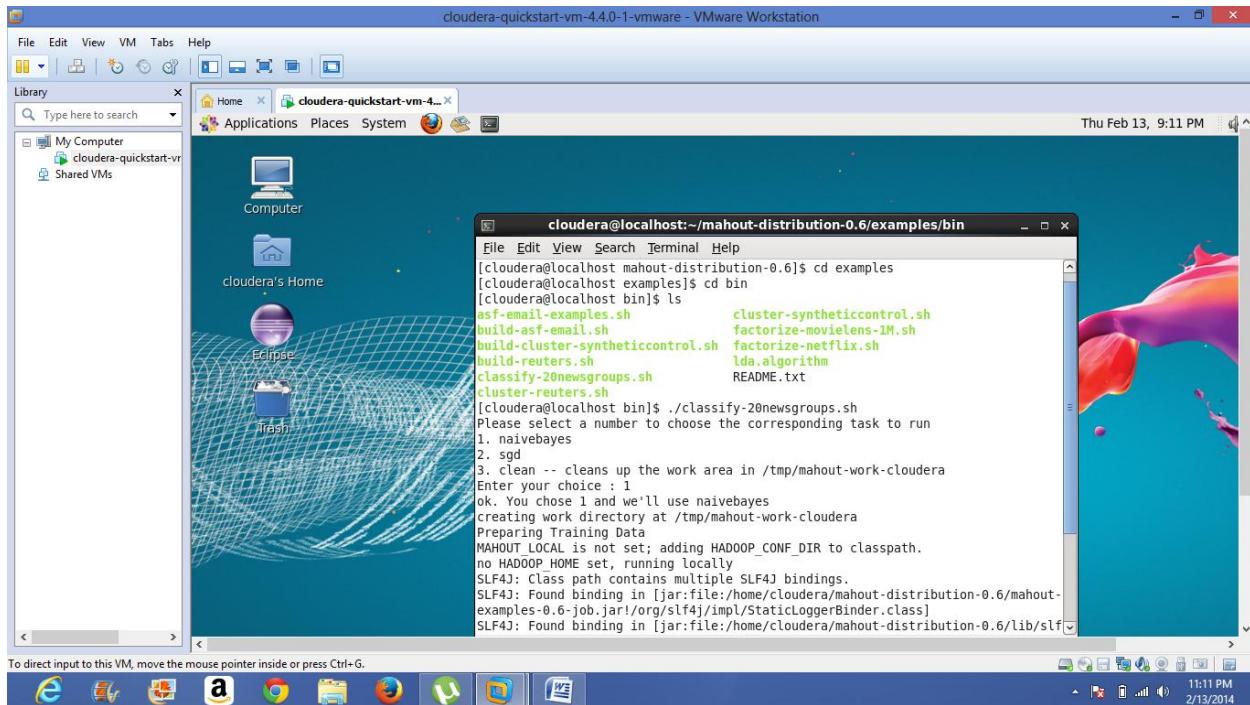
install mahout using pom by maven using the command mvn -f mahout-distribution-0.6.pom -DskipTestsinstall.



installation continues.



After installation go to examples then go to bin then implement the command ./classify-20newsgroup.sh



Then output can be shown as below.

The screenshot shows a VMware Workstation interface with a single virtual machine running. The title bar reads "cloudera-quickstart-vm-4.0.1-vmware - VMware Workstation". The desktop environment is Windows 7. A terminal window titled "cloudera@localhost:~/mahout-distribution-0.6/examples/bin" is open, displaying the following command-line output:

```
| 385   n   = comp.sys.mac.hardware
| 1    2   0   0   1   4   0   2   0   0   3
| 394   o   = sci.space
| 1    0   0   0   0   2   0   3   0   0   0
| 398   p   = rec.motorcycles
| 2    0   2   0   0   6   0   11  0   0   0
| 396   q   = rec.autos
| 6    13  0   0   0   14  8   7   0   0   1
| 1    0   11  10  7   0   3   297  0   2
| 389   r   = comp.graphics
| 11   28  4   109  11  3   0   1   0   0   0
| 310   s   = talk.politics.misc
| 3    1   3   1   6   12  0   9   0   0   0
| 396   t   = sci.med
14/02/13 21:17:04 INFO driver.MahoutDriver: Program took 20562 ms (Minutes: 0.34
27)
[cloudera@localhost bin]$
```

The terminal window has a blue header bar with the title "cloudera@localhost:~/mahout-distribution-0.6/examples/bin". The desktop background features a colorful abstract design. The taskbar at the bottom shows various icons for Microsoft Office applications like Word, Excel, and PowerPoint, along with a few other icons. The system tray on the right shows the date and time as "Thu Feb 13, 9:28 PM" and "2/13/2014".

## **MASH-UP application**

1. In order to develop the Mash-up application I choose JSFiddle.net
2. My intention is to develop an application in such a manner which provides the direction from one place to another place by means of four different ways of transportation, they are driving, walking, bicycling, transit. And it also provides the user to share that application on social sites.
3. In order to develop this application, I used Google Map APIs as well as openweathermap.org API
4. In this application I created a Jquery ready function for id: "control".

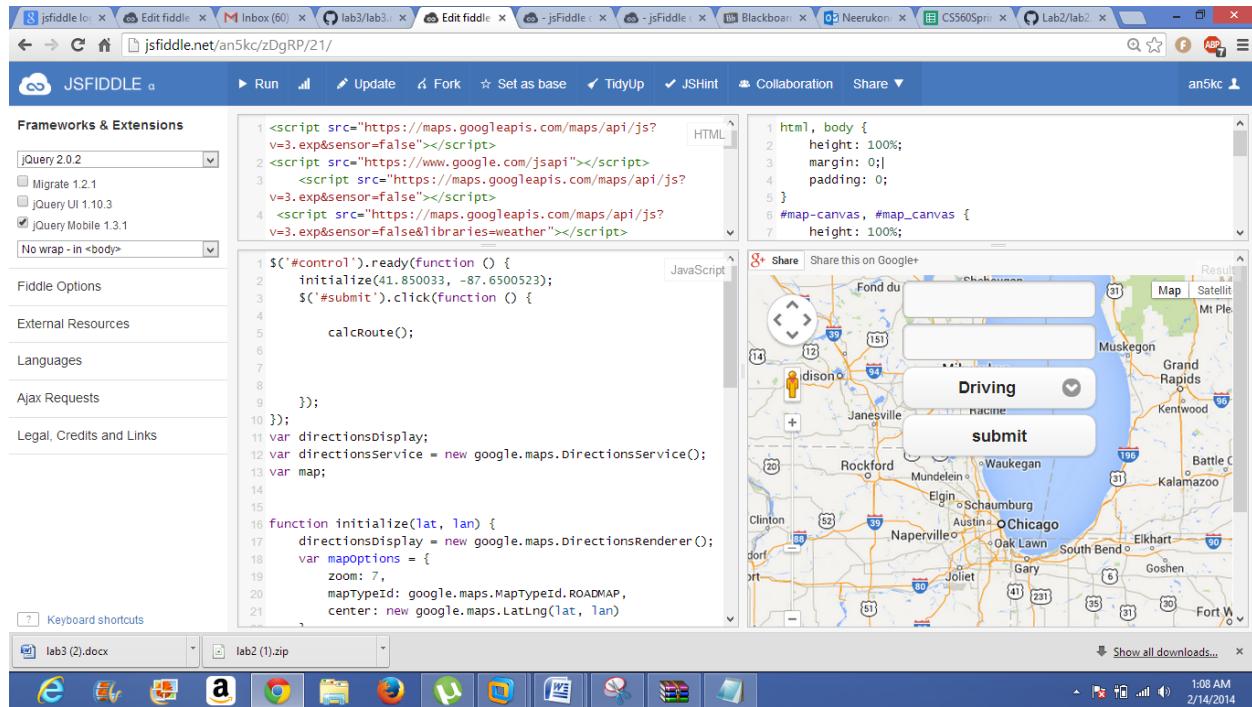
So this control block initializes the map whenever it is loaded

```
$('#control').ready(function() {  
    initialize(41.850033, -87.6500523);
```

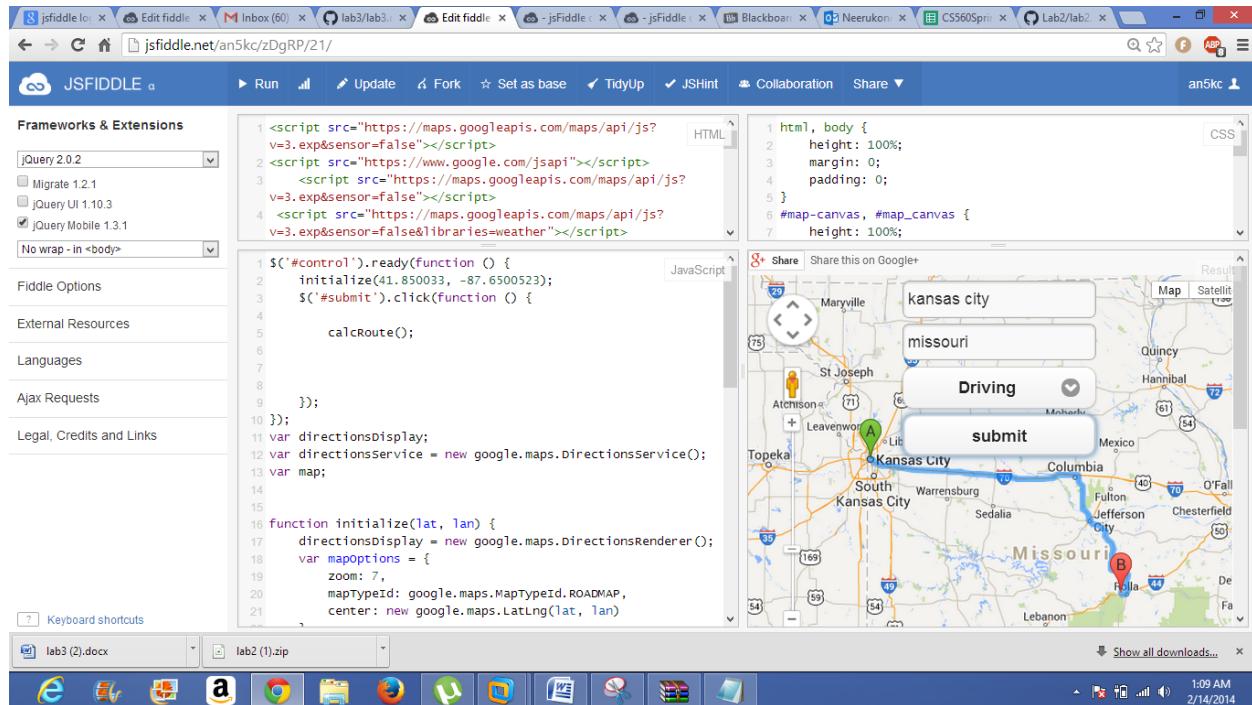
5. Here the user has to give the source and destination information in order to get the travelling directions between them, after that user has to click on submit button then route is calculated using calcRoute() function.
6. Then the direction between two places is displayed and the present weather conditions of those places are also be displayed.
7. Here sharing the application on social sites is also be enabled.

Jsfiddle link for the application: <http://jsfiddle.net/an5kc/zDgRP/21/>

## Developed mobile web application display .



below is screen shot that represents the user wants to go to Missouri(rolla) from Kansas city and he chosen the type of transportation as driving and the direction from source to destination is displayed.



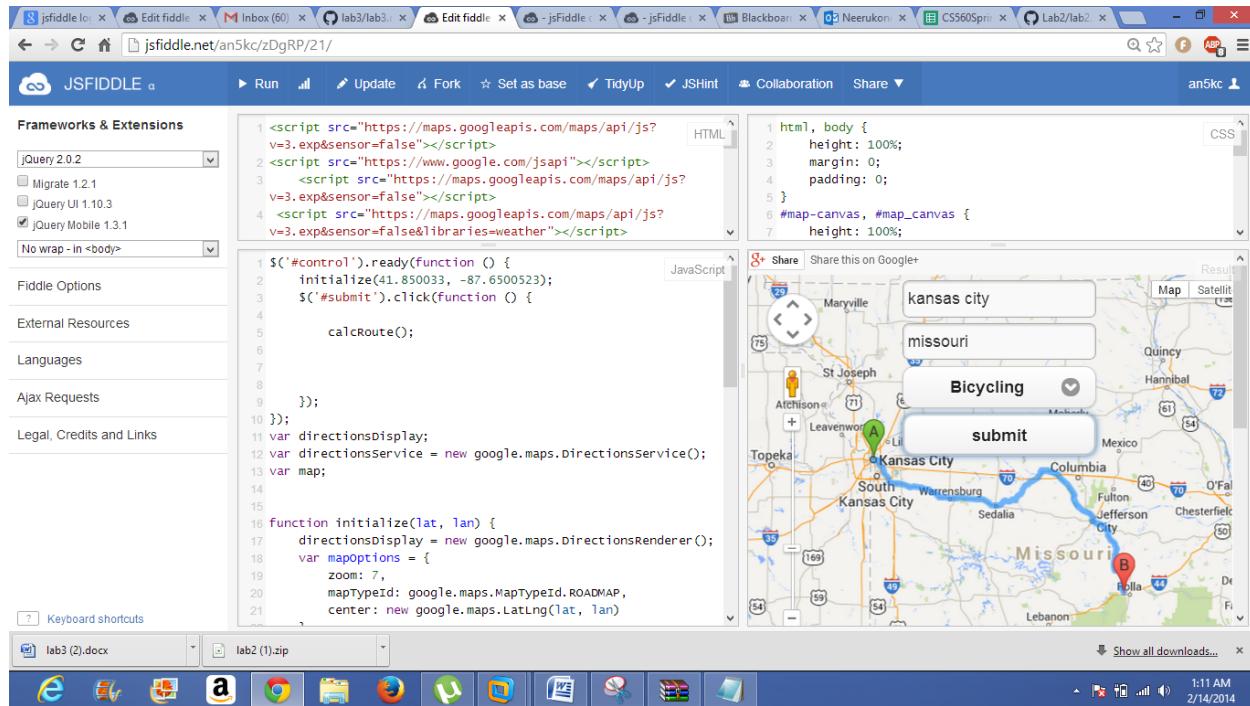
below is screen shot that represents the user wants to go to Missouri(rolla) from Kansas city and he chosen the type of transportation as walking and the direction from source to destination is displayed.

The screenshot shows a jsfiddle.net page with a Google Map. The map displays a route from Kansas City, Missouri (labeled 'A') to Rolla, Missouri (labeled 'B'). A blue line indicates the path, and a blue polygon shows the area. The route passes through Warrensburg, Sedalia, and Columbia. A callout box on the map specifies 'Walking' as the mode of transport. The map interface includes a zoom control, a search bar for 'kansas city' and 'missouri', and a 'submit' button. The jsfiddle interface on the left shows the HTML, CSS, and JavaScript code for the application.

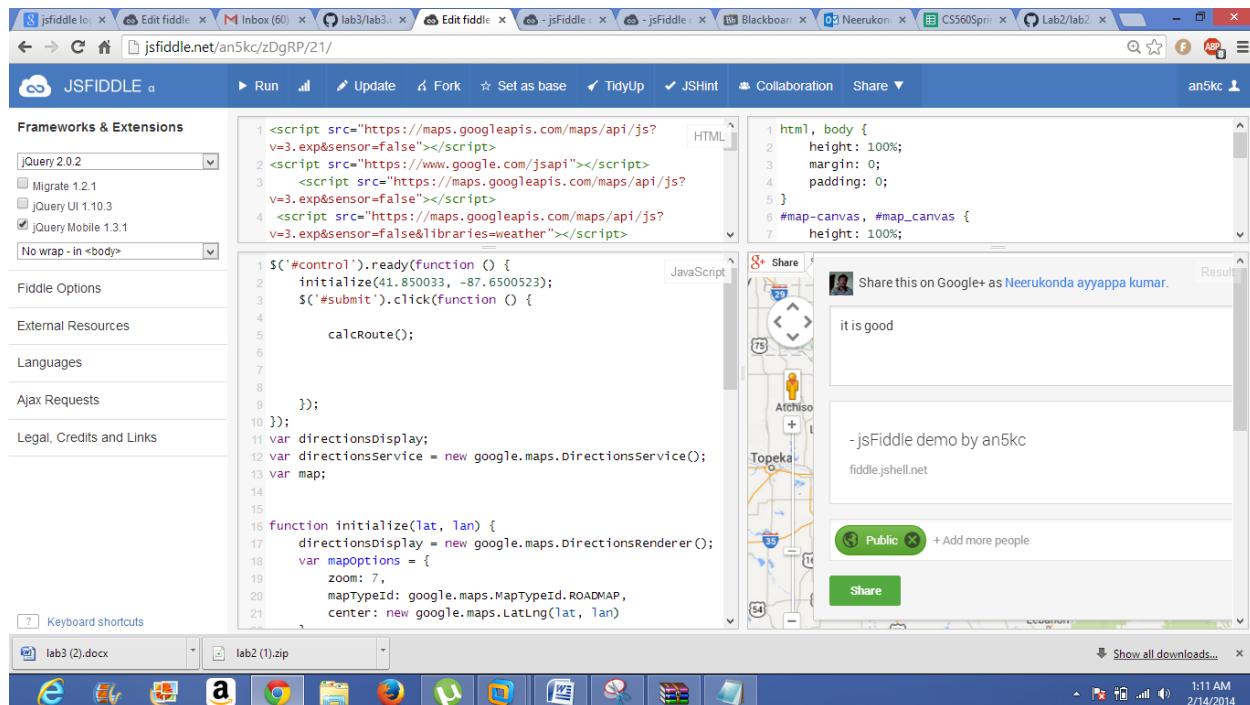
below is screen shot that represents the user wants to go to Missouri(rolla) from Kansas city and he chosen the type of transportation as transit and the direction from source to destination is displayed.

The screenshot shows a jsfiddle.net page with a Google Map. The map displays a route from Kansas City, Missouri (labeled 'A') to Rolla, Missouri (labeled 'B'). A blue line indicates the path, and a blue polygon shows the area. The route passes through Warrensburg, Sedalia, and Columbia. A callout box on the map specifies 'Transit' as the mode of transport. The map interface includes a zoom control, a search bar for 'kansas city' and 'missouri', and a 'submit' button. The jsfiddle interface on the left shows the HTML, CSS, and JavaScript code for the application.

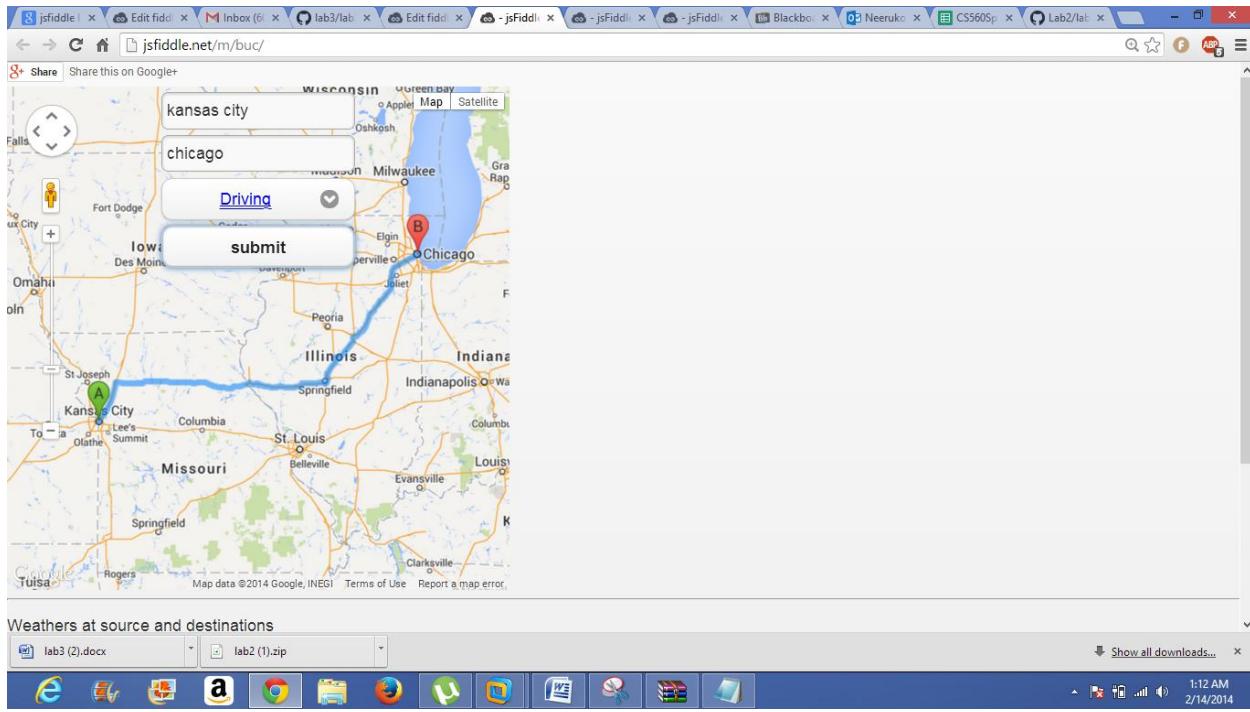
below is screen shot that represents the user wants to go to Missouri(rolla) from Kansas city and he chosen the type of transportation as bicycling and the direction from source to destination is displayed.



Here the user can share the application on gmail ,twitter and facebook and it is shown on below figure.



## Application view on mobile.



Here the temperatures of source and destination cities are also be provided.

