EXERCISE-8

All should be in C Drive

https://muhammadbilalyar.github.io/blogs/How-to-install-Hadoop-on-Window-10/

https://github.com/MuhammadBilalYar/HADOOP-INSTALLATION-ON-WINDOW-10/blob/master/Hadoop%20Configuration.zip

My Computer->properties->advanced sys settings->env.var->Path->
Hadoop
->create data folder->datanode,name node[fol]
->etc ->hadoop
-->core.site.xml(open in notepad)

```
        <property>
<name>fs.defaultFS</name>
<value>hdfs://localhost:9000</value>
 </property>
```

-->mapred-site.xml

```
  <property>
<name>mapreduce.framework.name</name>
<value>yarn</value>
 </property>
```

-->hdfs.site.xml

```
<configuration>
<property>
```

<name>dfa.replication</name> <value>1</value>

</property>

<property>

<name>dfs.namenode.name.dir</name>

<value>/C:\hadoop-2.8.0\hadoop-2.8.0\data\namenode</value>

</property>

<property>

<name>dfs.datanode.data.dir</name>

<value>/C:\hadoop-2.8.0\hadoop-2.8.0\data\datanode</value>

</property>
</configuration>
->yarn-site.xml
<property>

<name>yarn.nodemanager.aux-services</name> <value>mapreduce_shuffle</value>

</property>

<property>

<name>

yarn.nodemanager.auxservices.mapreduce.shuffle.class</name>
<value>org.apache.hadoop.mapred. ShuffleHandler</value>

</property>
</configuration>

→hadoop-env.cmd(ri8t clk->edit)
Set jdk path at
→The java implementation
Set JAVA_HOME→(PATH)
—----------
Hadoop COnfigurtaion

Bin:
Copy all files

Paste at -> Hadoop 2.8.0→ bin->(paste or replace)
—----------
Open cmd

1. hdfs namenode -format
2.cd\
3.cd C:\hadoop-2.8.0\sbin
4.start-all.cmd
->four windows will open
—-------
Open chrome

Localhost 8080 or 8088

Hapdoop interface will display

—----------

Open Netbeans 7.0.1

1.New file->java->java application
2.Change pro name and class name
2.1 write java code for wordcount
3. Right click project name→properties->libraries-> add jar file(c:hadoop\share or mapreduce).jar
4. run-> clean and built main project
5.o/p→ Building jar: (copy path)
→lib→documents→netbeansProjects→bulid->dist->pro name.jar
6.copy that jar file in C DRIVE (eg.mapreduce.jar)

—-------

Create notepad file
With words
In C drive

- —----
- Open cmd
- cd/
- cd/ hadoop path\bin
- hdfs namenode -format
- Cd ..
- Cd sbin
- Start-all.cmd
-
- jps

—----------

Open chrome

Localhost 8080 or 8088
Local host 50070

—----------

Open cmd
1.cd/
2.hadoop dfsadmin -safenode leave
3.hadoop fs -mkdir /input_dir
4.hadoop fs -put C:/wordcout.txt /input_dir
5.hadoop dfs -cat /input_dir
6.hadoop fs -ls /input_dir
7.hadoop dfs -cat /input_dir/wordcount.txt
8.hadoop jar C:/MapReduceCLient.jar wordcount /input_dir /output_dir
9.hadoop dfs -cat /Output_dir/*

EXERCISE-7

Installation of open stack

1.open vm ware
2.create virtual machine
3.start virtual machin
4.open terminal

Cmd:

```
systemctl disable firewalld
systemctl stop firewalld

systemctl disable NetworkManager
systemctl stop NetworkManager

systemctl enable network
systemctl start network

yum install -y centos-release-openstack-newton
yum update -y

Yum install -y openstack-packstack

packstack –allinone
```

If any error occr refer:

```
packstack - - answer - file
```

//open keyston admin

```
ls
cat keystonrc_admin
      →save your username & password
       →save the ip adress
       →open browser
       -> type–?eg 10.0.2.15/dashboard
      ->login
```

Open VM in openstack

Go to Networks
->create network
—---------->subnet:-->network address:192.168.37 0/24
—dns name→8.8.8.8
<create>

Go to compute->go to instances→launch instance
→name:
→ flavour: m1 small
->instancece boot: boot from imfage
->image name:cenos7

Go to access
->add key pair
Go to cmd →cat id_rsa.pub (copy and paste the key)

→paste in public key

Press Launch(instance created)

Go to network→router→create router
set GAteway:
External:external→set gateway

Click router name (you created)
 →add interface ---->subnet:(click downlink)

Go to access &security->sec.grps->
->MAnage rules->add rule
->rule:custom ipmp rule
->direction:ingress
->type:-1
->code:-1

>add rule
  >port:22

//open cmd

ping 8.21.28.113
ssh centosh@8.21.28.113
—----------

Ex5-Simulate a cloud scenario using CloudSim

1. Install java:https://www.oracle.com/java/technologies/javase/jdk15-archive-downloads.html
2. Install eclipse(2020-03):https://www.eclipse.org/downloads/packages/release/2020-03/r
3. Install cloud sim:https://cloud.google.com/sdk/docs/quickstart-windows
4. https://github.com/Cloudslab/cloudsim/releases

//Open Eclipse
->create new project then
Go to ->src->new->package
->click package->show in->system exp
->copy all java sdfs files in package folder
  —-->constant
 —-->datacenter
 —-->Generatematrics
 —-->sjf_scheuler
 —-->sjfddatacenter

->click project naeme->bulid path->configure path->class path->add jar file

//open python
App.yaml

runtime: python27
api_version: 1
 threadsafe: false

handlers:

- url: /

script: index.py