

### Experiment - 3

#### Installation steps for HBase:-

1. Download hbase from apache website  
(<https://dlcdn.apache.org/hbase/2.6.1/hbase-2.6.1-bin.tar.gz>)
2. Place the downloaded file into home folder  
hbase-1.1.2-bin.tar.gz in /home.
3. Unzip it by executing command ~~\$tar~~  
`$tar -xvf hbase-1.1.2-bin.tar.gz`  
It will unzip the contents, and it will create hbase-1.1.2 in the location /home.
4. Open hbase-env.sh (to open this go to home/hadoop-2.6.1/conf right click on conf open with terminal)
5. In terminal enter the command: `gedit hbase-env.sh`
6. Open hbase-env.sh as above and mention  
JAVA\_HOME path in the location.  
`export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64`  
(save and close the file).

7. Open `~/.bashrc` file (gedit `~/.bashrc`) and mention `HBASE_HOME` path as shown in below

export `HBASE_HOME = /home/student/hbase-2.6.1`

export `PATH = $PATH:$HBASE_HOME/bin` (save and close the file).

8. Add properties in the file.

Open `hbase-site.xml` (gedit `hbase-site.xml`) and place the following properties inside the file.

`<property>`

`<name> hbase.rootdir </name>`

`<value> file:///home/student/hbase-2.6.1 </value>`

`</property>`

(save and close the file)

Here we are placing two properties —

- One for HBase root directory and

- Second for data directory (correspond to Zookeeper).

All HMaster and Zookeeper activities point out to `hbase-site.xml`.



9. Close the terminal and go to home/hbase-2.6.1/bin  
Open with terminal

10. type the following commands

a. start -hbase.sh

b. jh:

c. hbase shell:

### Experiment:-

1. Creating table in hbase

create 'customer', 'customer-info', 'customer-details'

2. To list the tables in hbase: list;

3. To insert values into table:

put 'customer', '1', 'customer-info: name', 'sita'

put 'customer', '1', 'customer-details: mobile', '999999999'

4. To display the contents of the table

get 'customer', '1'

5. To insert other values into table:

put 'customer', '1', 'customer-info: age', '25'

put 'customer', '1', 'customer-details: email', 'sita@gmail.com'

6. To display the contents of the table.

get 'customer', '1'

7. To insert other row

put 'customer', '2', 'customer-info: name', 'rama'

put 'customer', '2', 'customer-details: mobile', '989999899'

put 'customer', '2', 'customer-info: age', '28'

put 'customer', '2', 'customer-details: email', 'rama@gmail.com'

8. To update the details  
put 'customer', '1', 'customer-info: name', 'John' #update name

put 'customer', '1', 'customer-info: age', '13' #update age

9. Delete an entire row (all columns) from the table.

~~delete all 'customer', '1'~~

10. Delete a specific column from a row:

delete 'customer', '1', 'customer-details: mobile'