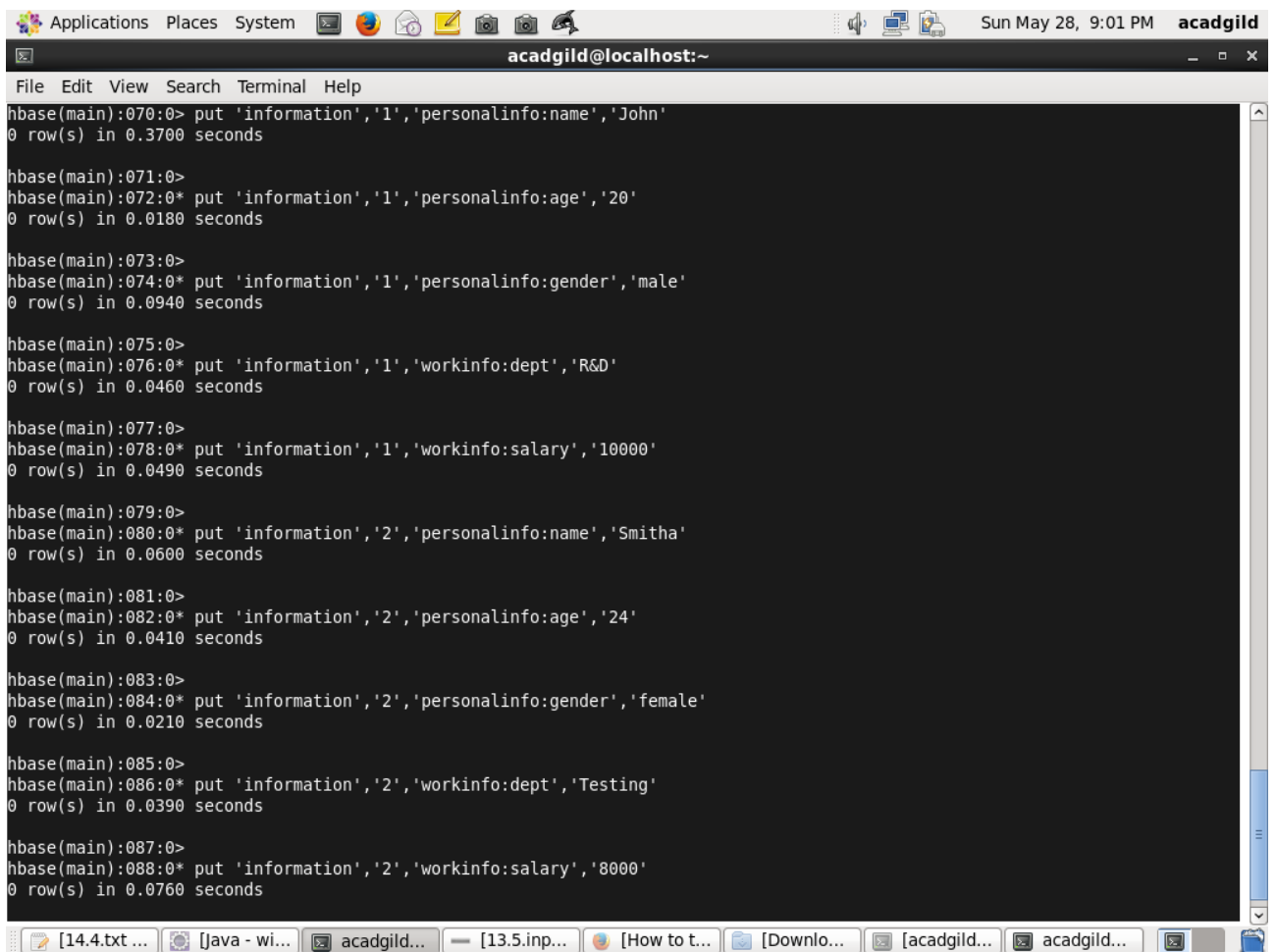# Assignment14.4

Integrate Hive with Hbase.

Create a table in Hbase and store some data in it and create a hive table pointing to that hbase table.

CREATING A TABLE IN HBASE

```
hbase(main):069:0* create 'information','personalinfo','workinfo'
0 row(s) in 2.3980 seconds

=> Hbase::Table - information
```

STORING DATA IN HBASE TABLE

```
Applications  Places  System                                    Sun May 28, 9:01 PM   acadgild
                              acadgild@localhost:~                              _  □  ×
File  Edit  View  Search  Terminal  Help
hbase(main):070:0> put 'information','1','personalinfo:name','John'
0 row(s) in 0.3700 seconds

hbase(main):071:0>
hbase(main):072:0* put 'information','1','personalinfo:age','20'
0 row(s) in 0.0180 seconds

hbase(main):073:0>
hbase(main):074:0* put 'information','1','personalinfo:gender','male'
0 row(s) in 0.0940 seconds

hbase(main):075:0>
hbase(main):076:0* put 'information','1','workinfo:dept','R&D'
0 row(s) in 0.0460 seconds

hbase(main):077:0>
hbase(main):078:0* put 'information','1','workinfo:salary','10000'
0 row(s) in 0.0490 seconds

hbase(main):079:0>
hbase(main):080:0* put 'information','2','personalinfo:name','Smitha'
0 row(s) in 0.0600 seconds

hbase(main):081:0>
hbase(main):082:0* put 'information','2','personalinfo:age','24'
0 row(s) in 0.0410 seconds

hbase(main):083:0>
hbase(main):084:0* put 'information','2','personalinfo:gender','female'
0 row(s) in 0.0210 seconds

hbase(main):085:0>
hbase(main):086:0* put 'information','2','workinfo:dept','Testing'
0 row(s) in 0.0390 seconds

hbase(main):087:0>
hbase(main):088:0* put 'information','2','workinfo:salary','8000'
0 row(s) in 0.0760 seconds
```

```
[14.4.txt ...   [Java - wi...   acadgild...   [13.5.inp...   [How to t...   [Downlo...   [acadgild...   acadgild...
```

CREATING A HIVE-TABLE POINTING TO HBASE TABLE

```
hive> create external table info_hbase(sno int, name string, age int,gender string,dept string,salary int)
    >
    > STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
    >
    > with serdeproperties ("hbase.columns.mapping"=":key,personalinfo:name,personalinfo:age,personalinfo:gender,workinfo:de
pt,workinfo:salary")
    >
    > tblproperties("hbase.table.name"="information");
OK
Time taken: 18.25 seconds
```

OUTPUT:
COMPARING HBASE TABLE DATA WITH HIVE DATA

From the below pictures it is observed that after creating a hive table pointing to the hbase table "information" the values of the hbase table are loaded into hive table and hence the data are same both in hive and in hbase table.

```
hbase(main):090:0* scan 'information'
ROW                          COLUMN+CELL
 1                           column=personalinfo:age, timestamp=1495985400752, value=20
 1                           column=personalinfo:gender, timestamp=1495985401010, value=male
 1                           column=personalinfo:name, timestamp=1495985400476, value=John
 1                           column=workinfo:dept, timestamp=1495985401228, value=R&D
 1                           column=workinfo:salary, timestamp=1495985401592, value=10000
 2                           column=personalinfo:age, timestamp=1495985402207, value=24
 2                           column=personalinfo:gender, timestamp=1495985402465, value=female
 2                           column=personalinfo:name, timestamp=1495985402028, value=Smitha
 2                           column=workinfo:dept, timestamp=1495985404397, value=Testing
 2                           column=workinfo:salary, timestamp=1495985404889, value=8000
2 row(s) in 0.5690 seconds
```

```
hive>
    > select * from info_hbase;
OK
1       John    20      male    R&D     10000
2       Smitha  24      female  Testing 8000
Time taken: 5.342 seconds, Fetched: 2 row(s)
hive>
```