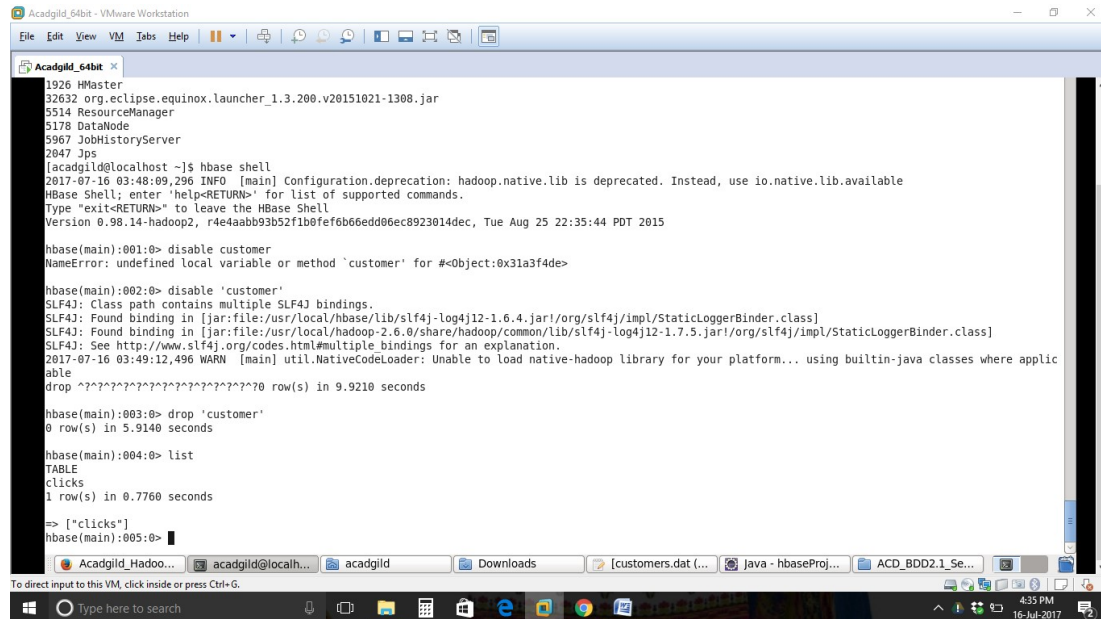


# Assignment 18.2

## Problem Statement:

Perform assignment 18.1 task of copying data from customers.dat to habse table customer using Java program. The program should be able to check for the presence of 'customer' table. In case the table exists, it must be dropped and recreated.

Customer Table not existing in hbase



```
Acadgild_64bit - VMware Workstation
File Edit View VM Tabs Help
Acadgild_64bit x
1926 HMaster
32632 org.eclipse.equinox.launcher_1.3.200.v20151021-1308.jar
5514 ResourceManager
5178 DataNode
5967 JobHistoryServer
2047 Jps
[acadgild@localhost ~]$ hbase shell
2017-07-16 03:48:09,296 INFO [main] Configuration.deprecation: hadoop.native.lib is deprecated. Instead, use io.native.lib.available
HBase Shell; enter 'help<RETURN>' for list of supported commands.
Type "exit<RETURN>" to leave the HBase Shell
Version 0.98.14-hadoop2, r4e4aabb93b52f1b0fef6b66edd06ec8923014dec, Tue Aug 25 22:35:44 PDT 2015

hbase(main):001:0> disable customer
NameError: undefined local variable or method `customer' for #<Object:0x31a3f4de>

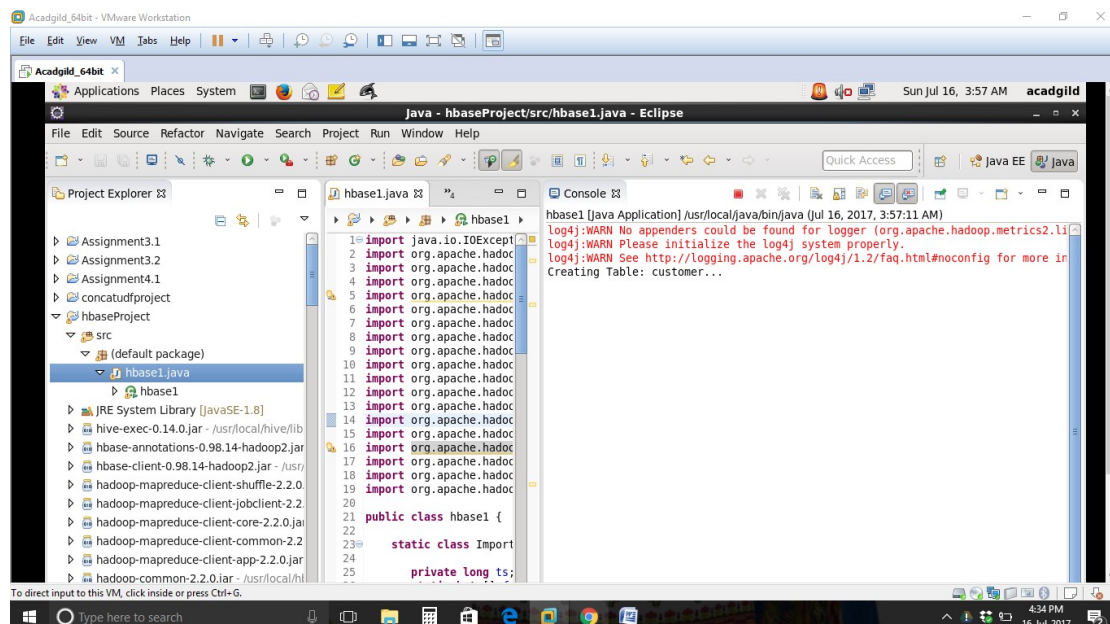
hbase(main):002:0> disable 'customer'
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/usr/local/hbase/lib/slf4j-log4j12-1.6.4.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
2017-07-16 03:49:12,496 WARN [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
drop ^?^?^?^?^?^?^?^?^? row(s) in 9.9210 seconds

hbase(main):003:0> drop 'customer'
0 row(s) in 5.9140 seconds

hbase(main):004:0> list
TABLE
clicks
1 row(s) in 0.7760 seconds

=> ["clicks"]
hbase(main):005:0>
```

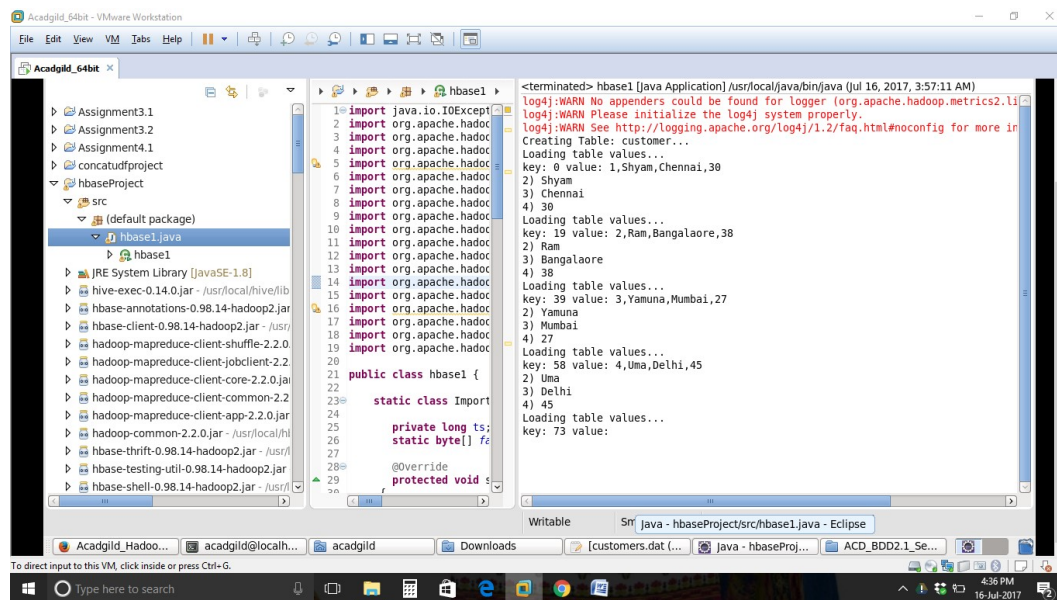
After running the java program , table 'customer ' is being created



```
Acadgild_64bit - VMware Workstation
File Edit View VM Tabs Help
Acadgild_64bit x
Applications Places System
Java - hbaseProject/src/hbase1.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
hbase1.java x
Console
hbase1 [Java Application] /usr/local/java/bin/java (Jul 16, 2017, 3:57:11 AM)
log4j:WARN No appenders could be found for logger (org.apache.hadoop.metrics2.impl.Metrics2Impl).
log4j:WARN Please initialize the log4j system properly.
log4j:WARN See http://logging.apache.org/log4j/1.2/faq.html#noconfig for more info.
Creating Table: customer...

1 import java.io.IOException;
2 import org.apache.hadoop.conf.Configuration;
3 import org.apache.hadoop.hbase.HBaseConfiguration;
4 import org.apache.hadoop.hbase.HBaseUtil;
5 import org.apache.hadoop.hbase.TableName;
6 import org.apache.hadoop.hbase.client.*;
7 import org.apache.hadoop.hbase.util.Bytes;
8 import org.apache.hadoop.hbase.util.Pair;
9 import org.apache.hadoop.hbase.util.StringUtils;
10 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
11 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
12 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
13 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
14 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
15 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
16 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
17 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
18 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
19 import org.apache.hadoop.hbase.util.ValueOnlyComparator;
20
21 public class hbase1 {
22
23     static class Import
24
25     private long ts;
```

Data from customers.dat is being loaded in hbase table 'customer'

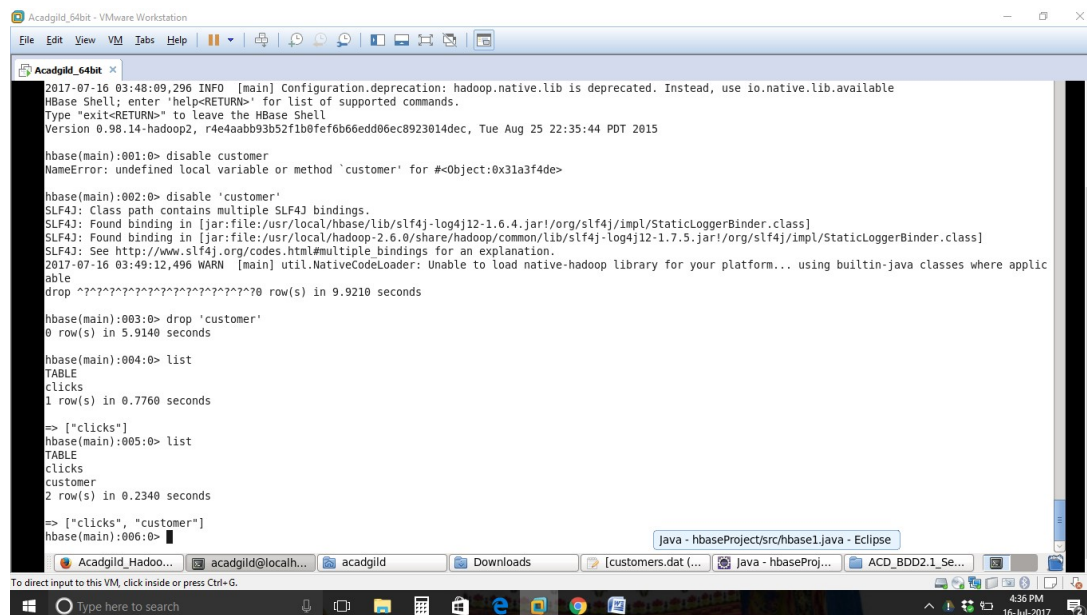


The screenshot shows the Eclipse IDE with the following components:

- Project Explorer:** Shows a project named 'hbaseProject' with a source folder 'src' containing 'hbase1.java'.
- Editor:** Displays the 'hbase1.java' file with the following code:

```
1 import java.io.IOException;
2 import org.apache.hadoop.conf.Configuration;
3 import org.apache.hadoop.hbase.HBaseConfiguration;
4 import org.apache.hadoop.hbase.HBaseTableDescriptor;
5 import org.apache.hadoop.hbase.HTable;
6 import org.apache.hadoop.hbase.HTableInterface;
7 import org.apache.hadoop.hbase.TableName;
8 import org.apache.hadoop.hbase.client.*;
9 import org.apache.hadoop.hbase.util.Bytes;
10 import org.apache.hadoop.hbase.util.Pair;
11 import org.apache.hadoop.hbase.util.StringUtils;
12 import org.apache.hadoop.hbase.util.ValueBytes;
13 import org.apache.hadoop.hbase.util.ValueBytesPair;
14 import org.apache.hadoop.hbase.util.ValueBytesPairUtil;
15 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtil;
16 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtil;
17 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtilUtil;
18 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtilUtilUtil;
19 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtilUtilUtilUtil;
20
21 public class hbase1 {
22
23     static class Import
24
25     private long ts;
26     static byte[] f;
27
28     @Override
29     protected void t
```
- Console:** Shows the output of the Java application, including warnings about log4j and the creation of the 'customer' table. The output also shows the loading of table values for the 'customer' table, with keys and values being displayed.

Hbase table 'cusustomer' is created

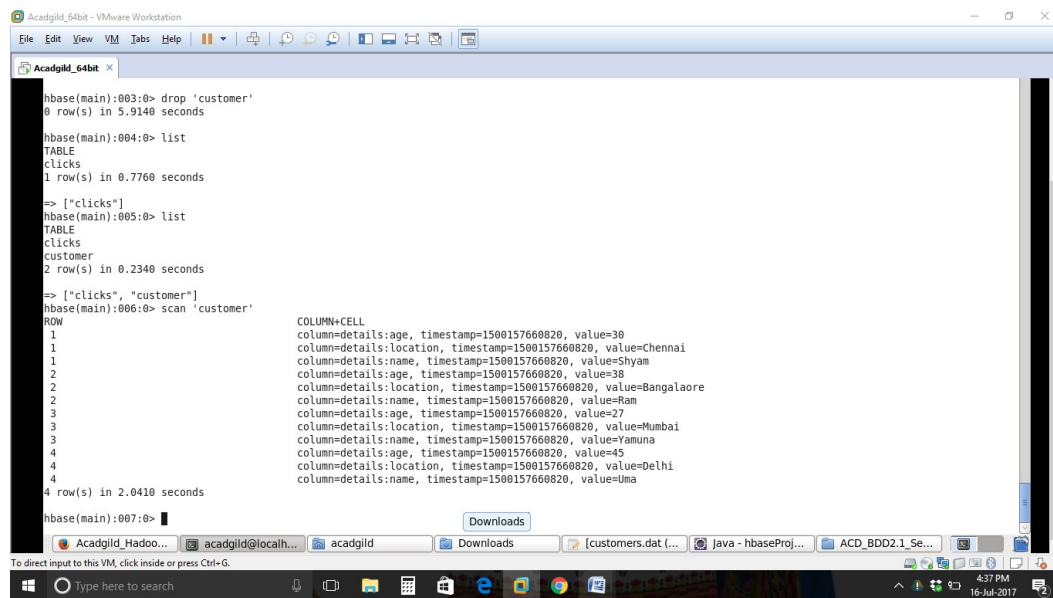


The screenshot shows the Eclipse IDE with the following components:

- Project Explorer:** Shows a project named 'hbaseProject' with a source folder 'src' containing 'hbase1.java'.
- Editor:** Displays the 'hbase1.java' file with the following code:

```
1 import java.io.IOException;
2 import org.apache.hadoop.conf.Configuration;
3 import org.apache.hadoop.hbase.HBaseConfiguration;
4 import org.apache.hadoop.hbase.HBaseTableDescriptor;
5 import org.apache.hadoop.hbase.HTable;
6 import org.apache.hadoop.hbase.HTableInterface;
7 import org.apache.hadoop.hbase.TableName;
8 import org.apache.hadoop.hbase.client.*;
9 import org.apache.hadoop.hbase.util.Bytes;
10 import org.apache.hadoop.hbase.util.Pair;
11 import org.apache.hadoop.hbase.util.StringUtils;
12 import org.apache.hadoop.hbase.util.ValueBytes;
13 import org.apache.hadoop.hbase.util.ValueBytesPair;
14 import org.apache.hadoop.hbase.util.ValueBytesPairUtil;
15 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtil;
16 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtil;
17 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtilUtil;
18 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtilUtilUtil;
19 import org.apache.hadoop.hbase.util.ValueBytesPairUtilUtilUtilUtilUtilUtil;
20
21 public class hbase1 {
22
23     static class Import
24
25     private long ts;
26     static byte[] f;
27
28     @Override
29     protected void t
```
- Console:** Shows the output of the Java application, including warnings about log4j and the creation of the 'customer' table. The output also shows the loading of table values for the 'customer' table, with keys and values being displayed.

Data from customers.dat is loaded in table 'hbase'



The screenshot shows a VMware Workstation window titled 'Acadgild\_64bit'. Inside, a terminal window displays the following HBase commands and their outputs:

```
hbase(main):003:0> drop 'customer'
0 row(s) in 5.9140 seconds

hbase(main):004:0> list
TABLE
clicks
1 row(s) in 0.7760 seconds

=> ["clicks"]
hbase(main):005:0> list
TABLE
clicks
customer
2 row(s) in 0.2340 seconds

=> ["clicks", "customer"]
hbase(main):006:0> scan 'customer'

ROW                                COLUMN+CELL
1                                  column=details:age, timestamp=1500157660820, value=30
1                                  column=details:location, timestamp=1500157660820, value=Chennai
1                                  column=details:name, timestamp=1500157660820, value=Shyam
2                                  column=details:age, timestamp=1500157660820, value=38
2                                  column=details:location, timestamp=1500157660820, value=Bangalore
2                                  column=details:name, timestamp=1500157660820, value=Ram
3                                  column=details:age, timestamp=1500157660820, value=27
3                                  column=details:location, timestamp=1500157660820, value=Mumbai
3                                  column=details:name, timestamp=1500157660820, value=Yamuna
4                                  column=details:age, timestamp=1500157660820, value=45
4                                  column=details:location, timestamp=1500157660820, value=Delhi
4                                  column=details:name, timestamp=1500157660820, value=Uma
4 row(s) in 2.0410 seconds

hbase(main):007:0>
```

The terminal window is part of a desktop environment with a taskbar at the bottom showing various applications and the system clock (4:37 PM, 16-Jul-2017).