Executing Hive UDF

Prerequisites for hive udf: **Below jar files need to be added in the code.**

Hadoop-core-jar:

https://drive.google.com/file/d/0Bxr27gVaXO5sXzlCOFpfN1VkcXM/view?usp=sharing

Hive-exec jar:

https://drive.google.com/file/d/0Bxr27gVaXO5sd1hkM195cU14Qmc/view?usp=sharing

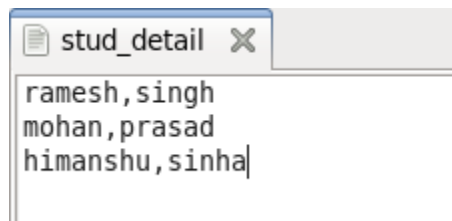## Problem statement:

Write a hive udf to convert lower case string to uppercase.

Data set to be used in the demo(comma delimited)

stud_detail ✕

```
ramesh,singh
mohan,prasad
himanshu,sinha
```
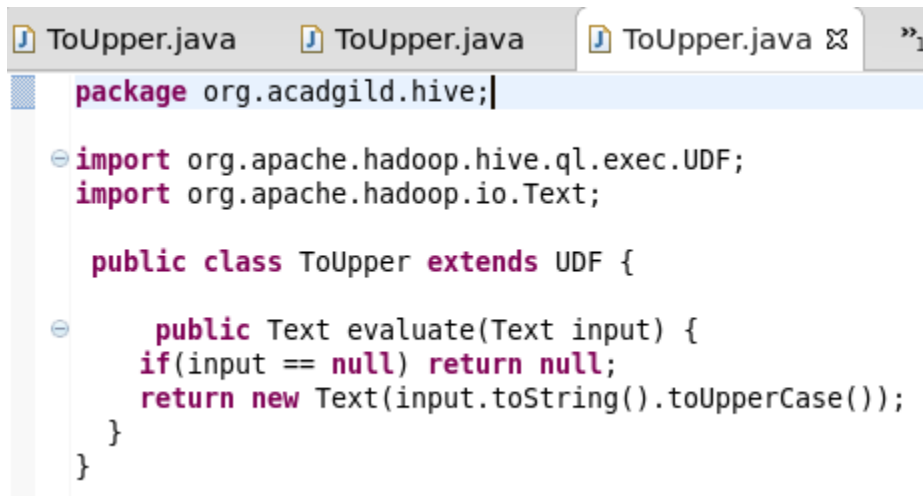
Refer the below steps for executing a hive udf.

Step 1: write the below code in eclipse and then add the above mentioned jar files and then export it in the hadoop environment as a jar file.

```java
package org.acadgild.hive;
import org.apache.hadoop.hive.ql.exec.UDF;
import org.apache.hadoop.io.Text;

 class ToUpper extends UDF {

  Text evaluate(Text input) {
   if(input == null) return null;
    return new Text(input.toString().toUpperCase());
 }
}
```

Step 2: Creating a table with student detail.

```
hive> create table student_data(fname string,lname string)row format delimited f
ields terminated  by ',';
OK
Time taken: 0.319 seconds
```

Step 3: Loading the data into table student_data.

```
hive> load data local inpath '/home/acadgild/stud_detail' into table student_dat
a;
Loading data to table default.student_data
Table default.student_data stats: [numFiles=1, totalSize=41]
OK
Time taken: 0.833 seconds
hive>
```

Step 4: Checking the data has been loaded or not using select statement.

```
hive> select * from student_data;
OK
ramesh   singh
mohan    prasad
himanshu         sinha
Time taken: 0.369 seconds, Fetched: 3 row(s)
hive>
```

Step 5: Add the jar file with complete path of the jar made in the above case.

```
hive> add jar /home/acadgild/Desktop/up_case1.jar;
Added [/home/acadgild/Desktop/up_case1.jar] to class path
Added resources: [/home/acadgild/Desktop/up_case1.jar]
```

Step 6: Create a temporary function as shown below:

```
hive> CREATE TEMPORARY FUNCTION toUpper as 'org.acadgild.hive.ToUpper';
OK
Time taken: 0.009 seconds
```

Step 7: use the select statement to convert the first name to uppercase.

```
hive> select toUpper(fname) from student_data;
OK
RAMESH
MOHAN
HIMANSHU
Time taken: 0.891 seconds, Fetched: 3 row(s)
hive>
```