

# Hive Homework

作业要求:

使用附件中包含的 Stock.csv 文件，结合 Hive 然后完成以下要求:

- (1) Check how many rows are inserted.
- (2) Select all the stock info in 2008.
- (3) Check if table is internal or external. If internal, then change it to external. If external, then change it to internal.
- (4) Find the maximum historical open price.

步骤提示：

## 1. Prepare File

将.csv 文件导入 Hadoop 集群服务器。

## 2. Create a New Database

## 3. Build Table

Hive 中存在 Date 格式，形式为 YYYY-MM-DD，然而我们的文件中的日期格式为 MM/DD/YYYY。

Here we need to create a temporary table deal with the date format (from MM/DD/YYYY to YYYY-MM-DD), the way to change format is by using:

```
TO_DATE(from_unixtime(UNIX_TIMESTAMP(stockdate,'MM/dd/yy')))
```

## 4. Check how many rows are inserted

By using the following command:

```
SELECT COUNT(*) FROM temp;
```

#### **5. Create a Partitioned Table to select all the stock info in 2008**

- PARTITIONED BY(year STRING)
- 新建一个 PARTITION (year = "2008") · 导入满足 stockDate > '2007-12-31' AND stockDate < '2009-01-01' 的数据即可。

#### **6. Build internal and external table separately and check the status**

Use the following command to check the table status:

```
DESCRIBE FORMATTED table_name;
```

- Switch a table from internal to external:

```
ALTER TABLE table_name SET TBLPROPERTIES('EXTERNAL'='TRUE');
```

- Switch a table from external to internal:

```
ALTER TABLE table_name SET TBLPROPERTIES('EXTERNAL'='FALSE');
```

#### **7. Find the maximum historical open price.**

Method 1: 按 open price 降序排序找出第一个数值。

Method 2: CAST(MAX())命令去直接寻找最大值。

Method 3: ...