

Hive Task 2:

1. Import RStudio Log Files from into HDFS.

Step 1 : Downloaded the file 2012-10-01

Step 2: Import the file in HDFS under RStudioLogs directory

```
Deleted /user/RstudioLogs
[cloudera@quickstart ~]$ hdfs dfs -ls /user
Found 11 items
drwxr-xr-x - cloudera supergroup          0 2021-06-08 06:04 /user/RStudioLogs
drwxr-xr-x - cloudera cloudera            0 2021-06-03 08:25 /user/cloudera
-rw-r--r--  3 cloudera supergroup        693 2021-05-27 09:18 /user/deckofcards.txt
drwxr-xr-x - cloudera supergroup          0 2021-06-03 22:40 /user/exercise
drwxr-xr-x - mapred  hadoop                0 2017-07-19 05:34 /user/history
drwxrwxrwx - hive   supergroup            0 2017-07-19 05:36 /user/hive
drwxrwxrwx - hue    supergroup            0 2017-07-19 05:35 /user/hue
drwxrwxrwx - jenkins supergroup           0 2017-07-19 05:35 /user/jenkins
drwxrwxrwx - oozie  supergroup            0 2017-07-19 05:35 /user/oozie
drwxrwxrwx - root   supergroup           0 2017-07-19 05:35 /user/root
drwxr-xr-x - hdfs   supergroup           0 2017-07-19 05:36 /user/spark
[cloudera@quickstart ~]$ hdfs dfs -put 20121001.csv /user/RStudioLogs
put: `20121001.csv': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -put /home/cloudera/Downloads/20121001.csv /user/RStudioLogs
[cloudera@quickstart ~]$ hdfs dfs -ls /user/RStudioLogs
Found 1 items
-rw-r--r--  1 cloudera supergroup       13619 2021-06-08 06:59 /user/RStudioLogs/20121001.csv
```

```
hive> describe oct1;
OK
date                string
time                string
size                bigint
r_version            string
r_arch              string
r_os                string
package             string
version             string
country             string
ip_id               int
Time taken: 0.229 seconds, Fetched: 10 row(s)
hive> select * from oct1;
OK
'date'  'time'  NULL  'r_version'  'r_arch'  'r_os'  'package'  'version'  'country'  NULL
'2012-10-01'  '00:30:13'  35165  '2.15.1'    'i686'    'linux-gnu'  'quadprog'  '1.5-4'  'AU'      1
'2012-10-01'  '00:30:15'  212967  '2.15.1'    'i686'    'linux-gnu'  'lavaan'    '0.5-9'  'AU'      1
'2012-10-01'  '02:30:16'  167199  '2.15.1'    'x86_64'  'linux-gnu'  'formatR'   '0.6'    'US'      2
'2012-10-01'  '02:30:16'  21164  '2.15.1'    'x86_64'  'linux-gnu'  'stringr'   '0.6.1'  'US'      2
'2012-10-01'  '02:30:13'  11046  '2.15.1'    'x86_64'  'linux-gnu'  'evaluate'  '0.4.2'  'US'      2
'2012-10-01'  '02:30:13'  42294  '2.15.1'    'x86_64'  'linux-gnu'  'digest'    '0.5.2'  'US'      2
'2012-10-01'  '02:30:16'  435407  '2.15.1'    'x86_64'  'linux-gnu'  'knitr'     '0.8'    'US'      2
'2012-10-01'  '02:26:05'  326143  '2.15.1'    'i686'    'linux-gnu'  'mice'      '2.13'   'AU'      1
'2012-10-01'  '02:21:09'  119459  '2.15.1'    'i686'    'linux-gnu'  'mitools'   '2.2'    'AU'      1
'2012-10-01'  '02:38:08'  868695  '2.15.0'    'x86_64'  'linux-gnu'  'RCurl'     '1.95-0'  'US'      3
'2012-10-01'  '02:38:08'  8954   '2.15.0'    'x86_64'  'linux-gnu'  'bitops'    '1.0-4.1'  'US'      3
```

Dump the first 10 entries on screen (attach a screen shot into your report) to check if it works or not

```
Time taken: 0.704 seconds, Fetched: 100 row(s)
hive> select * from oct1 LIMIT 10;
OK
"date"  "time"  NULL    "r_version"  "r_arch"  "r_os"  "package"  "version"  "country"  NULL
"2012-10-01"  "00:30:13"  35165  "2.15.1"    "i686"  "linux-gnu"  "quadprog"  "1.5-4"  "AU"  1
"2012-10-01"  "00:30:15"  212967 "2.15.1"    "i686"  "linux-gnu"  "lavaan"    "0.5-9"  "AU"  1
"2012-10-01"  "02:30:16"  167199 "2.15.1"    "x86_64" "linux-gnu"  "formatR"   "0.6"    "US"  2
"2012-10-01"  "02:30:16"  21164  "2.15.1"    "x86_64" "linux-gnu"  "stringr"   "0.6.1"  "US"  2
"2012-10-01"  "02:30:13"  11046  "2.15.1"    "x86_64" "linux-gnu"  "evaluate"  "0.4.2"  "US"  2
"2012-10-01"  "02:30:13"  42294  "2.15.1"    "x86_64" "linux-gnu"  "digest"    "0.5.2"  "US"  2
"2012-10-01"  "02:30:16"  435407 "2.15.1"    "x86_64" "linux-gnu"  "knitr"     "0.8"    "US"  2
"2012-10-01"  "02:26:05"  326143 "2.15.1"    "i686"  "linux-gnu"  "mice"      "2.13"   "AU"  1
"2012-10-01"  "02:21:09"  119459 "2.15.1"    "i686"  "linux-gnu"  "mitools"   "2.2"    "AU"  1
Time taken: 0.133 seconds, Fetched: 10 row(s)
hive> █
```

Count the number of occurrences of different packages?

```
Time taken: 1.357 seconds, Fetched: 10 row(s)
hive> select package, count(package) from oct1 group by package;
Query ID = cloudera_20210608082626_c28c954c-7bb0-42f8-aade-612ea1919764
```

Total MapReduce CPU Time Spent: 4 seconds 800 msec

```
OK
"Amelia"      1
"Hmisc"      3
"RCurl"     59
"RSQLite"    1
"Rcpp"       1
"RcppArmadillo" 1
"Sleuth2"    4
"WriteXLS"   1
"bitops"     6
"devtools"   1
"digest"     1
"evaluate"   1
"forecast"   1
"formatR"    1
"fracdiff"   1
"knitr"      1
"lavaan"     1
"mice"       1
"mitools"    1
"mosaic"     62
"package"    1
"plyr"       1
"quadprog"   2
"reshape"    1
"scales"     3
"stringr"    1
"tseries"    1
```

Count the number of occurrences of different packages by operating system;

```
hive> select r_os,package, count(package) from oct1 group by r_os,package;
```

Query ID = cloudera_20210608083636_ce5481ee-3ba2-42f8-942d-7cb1cb422138

Total jobs = 1

Launching Job 1 out of 1

Number of reduce tasks not specified. Estimated from input data size.

```

OS
"darwin9.8.0"    "RCurl" 1
"darwin9.8.0"    "RcppArmadillo" 1
"darwin9.8.0"    "fracdiff" 1
"darwin9.8.0"    "quadprog" 1
"darwin9.8.0"    "reshape" 1
"darwin9.8.0"    "tseries" 1
"linux-gnu"      "Amelia" 1
"linux-gnu"      "Hmisc" 3
"linux-gnu"      "RCurl" 57
"linux-gnu"      "RSQLite" 1
"linux-gnu"      "Rcpp" 1
"linux-gnu"      "Sleuth2" 4
"linux-gnu"      "WriteXLS" 1
"linux-gnu"      "bitops" 6
"linux-gnu"      "devtools" 1
"linux-gnu"      "digest" 1
"linux-gnu"      "evaluate" 1
"linux-gnu"      "forecast" 1
"linux-gnu"      "formatR" 1
"linux-gnu"      "knitr" 1
"linux-gnu"      "lavaan" 1
"linux-gnu"      "mice" 1
"linux-gnu"      "mitools" 1
"linux-gnu"      "mosaic" 61
"linux-gnu"      "plyr" 1
"linux-gnu"      "quadprog" 1
```