CS 6350 Big data Management And Analytics

Homework 1

Execution Instructions

Introduction:

The following document briefly describes the set of instructions that needs to be followed for deploying the Hadoop Map reduce Jar files in the UTD cluster.

Commands:

Question 1:

Jar : EntityCount.jar

Input arguments: Input path(all yelp data), Output path

command: nohup hadoop jar \$HOME/bigdata/HW1/qn1/EntityCount.jar EntityCount /allyelpdata /\$USER/run1 &

Output capture

• Question 2:

Jar : **FilterCity.jar**

Input arguments: Input path(all yelp data), Output path

command: nohup hadoop jar \$HOME/bigdata/HW1/qn2/FilterCity.jar FilterCity /allyelpdata /\$USER/run2 &

Output capture

```
axs143632@cs6360:~[07:13:01] $ time nohup hadoop jar $HOME/bigdata/HW1/qn2/FilterCity.jar FilterCity /allyelpdata /$USER/run2 nohup: ignoring input and appending output to `nohup.out'

real 0m21.941s
user 0m7.096s
sys 0m0.295s
axs143632@cs6360:~[07:14:00] $ hdfs dfs -cat /$USER/run2/p*
15/06/26 19:14:07 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java clas ses where applicable
7R0qrKQbwkbRQNFGc5tDcQ
S506FIQdswKA0anIlQSF_g
```

Execution Instructions

• Question 3:

Jar: TopTenBusiness.jar

Input arguments: Input path(all yelp data), Output path

command: nohup hadoop jar \$HOME/bigdata/HW1/qn3/TopTenBusiness.jar TopTenBusiness /allyelpdata /\$USER/run3 &

Output capture

```
axs143632@cs6360:~[07:14:08] $ time nohup hadoop jar $HOME/bigdata/HW1/qn3/TopTenBusiness.jar TopTenBusiness /allyelpdata /$USE
R/run3
nohup: ignoring input and appending output to `nohup.out'
real
         0m21.484s
user
         0m6.129s
sys
         0m0.305s
               360:~[07:15:40] $ hdfs dfs -cat /$USER/run3/p*
15/06/26 19:16:10 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java clas
ses where applicable
Business ID
-HmR20K3fPL-MgVepruq1Q
-GESofE1yIavBPiJWdDRAA
-8MhEiQ0CXXQGIBC4EYpvw
-LHk6aRcgF-Q0JGIau2uXQ
-6fMAgRynU3iL_ZbQV3eLw
-KedUrm_YGt2s4Q9p_Q6Mg
-J5wUuLJdr0s28InPxGkmw
-H10Dd00MVWL843ErsV6VA
 7r5-GDmuXsgRhkBnN0nqA
-Fef5c2ZcJ_YKh963XoaQw
```

Question 4:

Jar : TopTenBusinessDetails.jar

Input arguments: -D business.data=<path to business data>,-D review.data=<path to review data>, Output path

command: nohup hadoop jar \$HOME/bigdata/HW1/qn4/TopTenBusinessDetails.jar TopTenBusinessDetails -D business.data=/yelpbusiness/business.csv -D review.data=/yelpreview/review.csv /\$USER/run4 &

Execution Instructions

Output capture

```
axs143632@cs6360:~[07:16:11] $ time nohup hadoop jar $HOME/bigdata/HW1/qn4/TopTenBusinessDetails.jar TopTenBusinessDetails -D b
usiness.data=/yelpreview.csv /$USER/run4
nohup: ignoring input and appending output to `nohup.out'
          0m21.504s
user
          0m8.072s
sys
          0m0.347s
 axs143632@cs6360:~[07:17:19] $ hdfs dfs -cat /$USER/run4/p*
15/06/26 19:17:26 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java clas
ses where applicable
                    Full Address
                                                              Avg. Rating
Business ID
                                         Categories
D1_25rfl7k6vhTJc110PoQ Amherst, MA 01002
                                                              ['Photographers', 'Event Planning & Services'] 5.0
                              Amnerst, MA 1002 [Photographers, Event Planning & Services] 5.0

West Lafayette, IN 47906 ['Local Services', 'Sewing & Alterations']

Claremont, CA 91711 ['Local Services', 'Carpet Cleaning'] 5.0

Pasadena, CA 91125 ['Photographers', 'Event Planning & Services'] 5.0

Mountain View, CA 94309 ['Photographers', 'Event Planning & Services'] 5.0
2a-UIu0o_IpGCj_45IHBRA West Lafayette, IN 47906
ItB4MzEK8bZae3FdmqZSsQ
GhViuGdDMbhIwi2JzC707w
AbB1M0Le_qylcAoRZMe1UA
4T7yBnAHJZD - 1vTeD9WLyQ
                               San Luis Obispo, CA 93405
                                                                         ['Photographers', 'Event Planning & Services'] 5.0
                                                              ['Shopping Centers', 'Shopping', 'Local Flavor'] 5.0
['Photographers', 'Videographers', 'Event Planning & Services'] 5.0
['Food', 'Bakeries'] 5.0
['Wedding Planning', 'Event Planning & Services'] 5.0
Ao7lyljfdSzZTIvat0dryA
                               Ithaca, NY 14850
                              San Luis Obispo, CA
San Luis Obispo, CA
3J9sNtEsONIL-F2tQHfTUg
1YW_208GTEtLuJeFTqQvlg
Du6SkVBGkb7dqtCpdz-_Kg San Luis Obispo, CA
```

Question 5:

Jar: UserDetails.jar

Input arguments: -D business.data=<path to business data>,Input path(all yelp data),
Output path

command: **nohup time hadoop jar UserDetails.jar UserDetails -D business.data=/yelpdata/data.csv /yelpdata/data.csv /\$USER/run5 &**

Output capture:

```
abinav@BICDEN:/media/abinav/Comm/MSINCSINUS/US/Summer 15/CS 6350 Big Data Management and Analytics/HM 1/Solutions/qn5[07:36:50] $ cat /tmp/output/part-r-000000 MAGCMn*3aXb0GOntw*TMCTg We hired Stanford's Bartender for a private movie screening party and will definitely use them again for all our events in the future. Carlos showed up on time, set up a beautiful bar and was very professional the entire evening. It is so nice to work with someone that clearly takes pride in what they do. I would highly recommend using Stanford's Bartender for your next event!
IUUQFV63C06RR8J_UNJFXQ Stanford's Bartender is anazing! From planning, shopping list, prep, event and clean-up - everything was top notch/outstanding!! I can't say enough good things about Carlos and his operation!! From the moment we spoke on the phone, I knew he was it - he knew his liquors and is not just a bar ard here at our home =) Not just great with drinks, but he's also good on gauging the crowd - it made for an energetic and fun party and all our guests loved him!!! I highly recommend him! Thanks Carlos, you are outstanding!!!

2NN-2YH6JznfyIf5p069g Thank you so much for making our Cinco de Mayo party such an awesome event! I was so impressed with the professionalism of both our bartender and Carlos! We will definitely be booking again! Thank you thank you!

57MX12Z2rEM1659G1QxdFQ Things could not have gone better for my husband's 40th birthday party. Jessica showed up right on time, and I felt so bad that our bar was outside in the 95 degree weather, but she didn't seem to mind at all. She was SO nice and so excited about the party. Everyone was blown away by her and the delicious cocktails! I noticed some people take cards, and I'm sure everyone will keep Stanford's in mind!! Also working with Carlos on the process was a breeze- thanks again for everything!
```

NOTE:

When the code for the Mapjoin was deployed in the UTD cluster, I was facing some exceptions, hence I tested it successfully by deploying it in my local machine.