Schema of Agent_login_v1

```
hive> describe agent_login_v1;
OK
col_name          data_type          comment
sl_no                       int
agent                       string
date                        string
loggin_time                 string
logout_time                 string
duration                    string
Time taken: 0.366 seconds, Fetched: 6 row(s)
```

Schema of Agent_performance:

```
hive> describe   agent_performance;
OK
col_name          data_type          comment
sl_no                       int
date                        string
agent_name                  string
total_chat                  int
average_response_time    timestamp
avarage_resolution_time  timestamp
average_rating              float
total_feedback              int
Time taken: 0.24 seconds, Fetched: 8 row(s)
```

2. Dump the data inside the hdfs in the given schema location.

```
[cloudera@quickstart ~]$ hadoop fs -ls /user/hive/warehouse/hive_class_a2.db/agent_login_v1
Found 1 items
-rwxrwxrwx   1 cloudera supergroup      55351 2022-09-29 03:58 /user/hive/warehouse/hive_class_a2.db/agent_login_v1/AgentLogingReport.csv
[cloudera@quickstart ~]$
```

```
Found 1 items
-rwxrwxrwx   1 cloudera supergroup      55351 2022-09-29 03:58 /user/hive/warehouse/hive_class_a2.db/agent_login_v1/AgentLogingReport.csv
[cloudera@quickstart ~]$ hadoop fs -ls /user/hive/warehouse/hive_class_a2.db/agent_performance_v1
Found 1 items
-rwxrwxrwx   1 cloudera supergroup     109853 2022-09-29 09:42 /user/hive/warehouse/hive_class_a2.db/agent_performance_v1/AgentPerformance.csv
[cloudera@quickstart ~]$
```

3. List of all agents' names.

```
hive> select agent from agent_login_v1;
OK
agent
Shivananda Sonwane
Khushboo Priya
Nandani Gupta
Hrisikesh Neogi
Mukesh
Sowmiya Sivakumar
Manjunatha A
Harikrishnan Shaji
Suraj S Bilgi
Shivan K
Anurag Tiwari
Ishawant Kumar
Shivan K
Shubham Sharma
Shivan K
Rerna Singh
Shivan K
Shivan K
Hrisikesh Neogi
Khushboo Priya
Ishtha Jain
Prateek_iot
Hrisikesh Neogi
Shivan K
Ishtha Jain
Khushboo Priya
Suraj S Bilgi
Mithun S
Harikrishnan Shaji
Manjunatha A
Hrisikesh Neogi
Sowmiya Sivakumar
Madhulika G
Moktiar Ahmed Bappy
```

4. Find out agent average rating.

```
avg_rating
1.4609629649255012
Time taken: 119.357 seconds, Fetched: 1 row(s)
```

5. Total working days for each agents:

```
agent_name          total_working_days
Abhishek            30
Aditya    30
Aditya Shinde       30
Aditya_iot          30
Amersh    30
Ameya Jain          30
Anirudh             30
Ankit Sharma        30
Ankitjha            30
Anurag Tiwari       30
Aravind             30
Ashad Nasim         30
Ashish    60
Ayushi Mishra       30
Bharath             30
Boktiar Ahmed Bappy         30
Chaitra K Hiremath          30
Deepranjan Gupta            30
Dibyanshu           30
Harikrishnan Shaji          30
Hitesh Choudhary            30
Hrisikesh Neogi 30
Hyder Abbas         30
Ineuron Intelligence        30
Ishawant Kumar   30
Jawala Prakash   30
Jayant Kumar     30
Jaydeep Dixit    30
Khushboo Priya   30
Madhulika G      30
Mahak    30
Mahesh Sarade    30
Maitry   30
Maneesh             30
Manjunatha A     30
Mithun S            30
```

```
Mukesh   30
Mukesh Rao          30
Muskan Garg         30
Nandani Gupta       30
Nishtha Jain        30
Nitin M 30
Prabir Kumar Satapathy   30
Prateek _iot        30
Prerna Singh        30
Rishav Dash         60
Rohan    30
Saif Khan           30
Saikumarreddy N 30
Samprit             30
Sandipan Saha       30
Sanjeev Kumar       30
Sanjeevan           30
Saurabh Shukla   30
Shiva Srivastava            30
Shivan K            30
Shivan_S            30
Shivananda Sonwane          30
Shubham Sharma   30
Sowmiya Sivakumar           30
Spuri    30
Sudhanshu Kumar 30
Suraj S Bilgi    30
Swati    30
Tarun    30
Uday Mishra         30
Vasanth P           30
Vivek    30
Wasim    30
Zeeshan             30
Time taken: 76.442 seconds, Fetched: 70 row(s)
hive>
```

6. Total query that each agent have taken

agent_name	total_query
Abhishek	30
Aditya	30
Aditya Shinde	30
Aditya_iot	30
Amersh	30
Ameya Jain	30
Anirudh	30
Ankit Sharma	30
Ankitjha	30
Anurag Tiwari	30
Aravind	30
Ashad Nasim	30
Ashish	60
Ayushi Mishra	30
Bharath	30
Boktiar Ahmed Bappy	30
Chaitra K Hiremath	30
Deepranjan Gupta	30
Dibyanshu	30
Harikrishnan Shaji	30
Hitesh Choudhary	30
Hrisikesh Neogi	30
Hyder Abbas	30
Ineuron Intelligence	30
Ishawant Kumar	30
Jawala Prakash	30
Jayant Kumar	30
Jaydeep Dixit	30
Khushboo Priya	30
Madhulika G	30
Mahak	30
Mahesh Sarade	30
Maitry	30
Maneesh	30
Manjunatha A	30
Mithun S	30
Mukesh	30
Mukesh Rao	30
Mukesh	30
Mukesh Rao	30
Muskan Garg	30
Nandani Gupta	30
Nishtha Jain	30
Nitin M	30
Prabir Kumar Satapathy	30
Prateek _iot	30
Prerna Singh	30
Rishav Dash	60
Rohan	30
Saif Khan	30
Saikumarreddy N	30
Samprit	30
Sandipan Saha	30
Sanjeev Kumar	30
Sanjeevan	30
Saurabh Shukla	30
Shiva Srivastava	30
Shivan K	30
Shivan_S	30
Shivananda Sonwane	30
Shubham Sharma	30
Sowmiya Sivakumar	30
Spuri	30
Sudhanshu Kumar	30
Suraj S Bilgi	30
Swati	30
Tarun	30
Uday Mishra	30
Vasanth P	30
Vivek	30
Wasim	30
Zeeshan	30

Time taken: 78.2 seconds, Fetched: 70 row(s)
hive>

7. Total Feedback that each agent have received

agent_name	total_feedback
Abhishek	0
Aditya	0
Aditya Shinde	153
Aditya_iot	131
Amersh	0
Ameya Jain	228
Anirudh	39
Ankit Sharma	0
Ankitjha	3
Anurag Tiwari	3
Aravind	233
Ashad Nasim	9
Ashish	0
Ayushi Mishra	329
Bharath	247
Boktiar Ahmed Bappy	311
Chaitra K Hiremath	37
Deepranjan Gupta	312
Dibyanshu	0
Harikrishnan Shaji	231
Hitesh Choudhary	0
Hrisikesh Neogi	367
Hyder Abbas	0
Ineuron Intelligence	0
Ishawant Kumar	202
Jawala Prakash	250
Jayant Kumar	70
Jaydeep Dixit	305
Khushboo Priya	289
Madhulika G	281
Mahak	5
Mahesh Sarade	216
Maitry	347
Maneesh	3
Manjunatha A	254
Mithun S	364
Mukesh	17
Mukesh Rao	5
Muskan Garg	37

Muskan Garg	37
Nandani Gupta	308
Nishtha Jain	257
Nitin M	0
Prabir Kumar Satapathy	222
Prateek _iot	107
Prerna Singh	235
Rishav Dash	264
Rohan	0
Saif Khan	0
Saikumarreddy N	290
Samprit	0
Sandipan Saha	18
Sanjeev Kumar	311
Sanjeevan	0
Saurabh Shukla	8
Shiva Srivastava	46
Shivan K	243
Shivan_S	4
Shivananda Sonwane	263
Shubham Sharma	300
Sowmiya Sivakumar	141
Spuri	0
Sudhanshu Kumar	2
Suraj S Bilgi	15
Swati	302
Tarun	6
Uday Mishra	0
Vasanth P	0
Vivek	20
Wasim	284
Zeeshan	335

Time taken: 77.49 seconds, F

8. Agent name who have average rating between 3.5 to 4.

agent_name	average_rating
Swati	3.67
Manjunatha A	3.6
Boktiar Ahmed Bappy	4.0
Prateek _iot	3.75
Nandani Gupta	3.79
Jaydeep Dixit	3.95
Mahesh Sarade	3.94
Zeeshan	3.79
Hrisikesh Neogi	3.77
Muskan Garg	4.0
Khushboo Priya	3.79
Wasim	3.95
Jawala Prakash	3.89
Shiva Srivastava	4.0
Nishtha Jain	3.67
Maitry	4.0
Shiva Srivastava	4.0
Nandani Gupta	3.61
Prerna Singh	3.8
Shivan K	4.0
Boktiar Ahmed Bappy	3.8
Muskan Garg	3.62
Chaitra K Hiremath	4.0
Harikrishnan Shaji	3.73
Wasim	3.92
Deepranjan Gupta	3.69
Mahesh Sarade	3.81
Nishtha Jain	3.92
Shivan K	3.9
Madhulika G	3.62
Rishav Dash	3.8
Prabir Kumar Satapathy	4.0
Boktiar Ahmed Bappy	4.0
Maitry	3.73
Nishtha Jain	3.69
Khushboo Priya	3.95
Boktiar Ahmed Bappy	3.77
Mahesh Sarade	3.5
Rishav Dash	3.67
Mithun S	3.75
Jawala Prakash	3.68

agent_name	average_rating
Jawala Prakash	4.0
Sanjeev Kumar	4.0
Sandipan Saha	3.62
Madhulika G	3.82
Ayushi Mishra	3.86
Shivan K	4.0
Hrisikesh Neogi	3.8
Nandani Gupta	3.89
Harikrishnan Shaji	3.7
Nishtha Jain	3.67
Manjunatha A	4.0
Anirudh	3.77
Swati	3.62
Maitry	3.75
Madhulika G	4.0
Jaydeep Dixit	4.0
Zeeshan	3.75
Nishtha Jain	3.73
Wasim	3.64
Manjunatha A	4.0
Ishawant Kumar	3.67
Jayant Kumar	3.76
Maneesh	4.0
Harikrishnan Shaji	4.0
Anurag Tiwari	3.5
Mithun S	3.86
Prabir Kumar Satapathy	4.0
Saurabh Shukla	3.67
Aditya_iot	3.83
Maitry	3.92
Shivananda Sonwane	3.71
Ameya Jain	4.0
Swati	4.0
Ashad Nasim	4.0
Prabir Kumar Satapathy	4.0
Boktiar Ahmed Bappy	3.78
Nishtha Jain	4.0
Ayushi Mishra	3.8
Shivan K	4.0
Shubham Sharma	4.0
Jawala Prakash	3.8
Sanjeev Kumar	4.0
Aditya Shinde	3.54

9. Agent name who have rating less than 3.5

```
OK
agent_name
Abhishek
Aditya
Aditya Shinde
Aditya_iot
Amersh
Ameya Jain
Anirudh
Ankit Sharma
Ankitjha
Anurag Tiwari
Aravind
Ashad Nasim
Ashish
Ayushi Mishra
Bharath
Boktiar Ahmed Bappy
Chaitra K Hiremath
Deepranjan Gupta
Dibyanshu
Harikrishnan Shaji
Hitesh Choudhary
Hrisikesh Neogi
Hyder Abbas
Ineuron Intelligenc
Ishawant Kumar
Jawala Prakash
Jayant Kumar
Jaydeep Dixit
Khushboo Priya
Madhulika G
Mahak
Mahesh Sarade
Maitry
Maneesh
Manjunatha A
Mithun S
Mukesh
Mukesh Rao
Muskan Garg
Nandani Gupta
```

```
Muskan Garg
Nandani Gupta
Nishtha Jain
Nitin M
Prabir Kumar Satapathy
Prateek _iot
Prerna Singh
Rishav Dash
Rohan
Saif Khan
Saikumarreddy N
Samprit
Sandipan Saha
Sanjeev Kumar
Sanjeevan
Saurabh Shukla
Shiva Srivastava
Shivan K
Shivan_S
Shivananda Sonwane
Shubham Sharma
Sowmiya Sivakumar
Spuri
Sudhanshu Kumar
Suraj S Bilgi
Swati
Tarun
Uday Mishra
Vasanth P
Vivek
Wasim
Zeeshan
Time taken: 74.736 seconds, Fetched: 70 row(s)
```

10. Agent name who have rating more than 4.5

```
agent_name
Aditya Shinde
Aditya_iot
Ameya Jain
Anirudh
Ankitjha
Aravind
Ayushi Mishra
Bharath
Boktiar Ahmed Bappy
Chaitra K Hiremath
Deepranjan Gupta
Harikrishnan Shaji
Hrisikesh Neogi
Ishawant Kumar
Jawala Prakash
Jayant Kumar
Jaydeep Dixit
Khushboo Priya
Madhulika G
Mahesh Sarade
Maitry
Manjunatha A
Mithun S
Mukesh
Mukesh Rao
Muskan Garg
Nandani Gupta
Nishtha Jain
Prabir Kumar Satapathy
Prateek _iot
Prerna Singh
Rishav Dash
Saikumarreddy N
Sandipan Saha
Sanjeev Kumar
Saurabh Shukla
Shiva Srivastava
```

```
Sanjeev Kumar
Saurabh Shukla
Shiva Srivastava
Shivan K
Shivananda Sonwane
Shubham Sharma
Sowmiya Sivakumar
Sudhanshu Kumar
Suraj S Bilgi
Swati
Vivek
Wasim
Zeeshan
Time taken: 75.308 seconds, Fetched: 47 row(s)
hive>
```

How many feedback agents have received more than 4.5 average

```
Stage-Stage-1: Map: 1   Reduce: 1    Cumulative CP
Total MapReduce CPU Time Spent: 13 seconds 910 m
OK
number_of_agent
47
Time taken: 76.307 seconds, Fetched: 1 row(s)
hive>
```

14. Find the number of chat on which they have received a feedback

```
total_feedback   number_of_chat
1          48
2          125
3          145
4          211
5          234
6          336
7          332
8          327
9          644
10         598
11         766
12         776
13         945
14         973
15         1131
16         611
17         855
18         777
19         660
20         627
21         378
22         386
23         135
24         630
25         254
26         332
27         194
28         336
29         52
30         94
31         39
32         33
33         132
35         132
37         172
39         63
40         55
52         97
56         67
Time taken: 77.652 seconds, Fetched: 39 row(s)
```

16. Perform inner join, left join and right join based on the agent column and after joining the table export that data into your local system.

```
[cloudera@quickstart ~]$ ls /tmp/hive_class_output
000000_0
[cloudera@quickstart ~]$ ls /tmp/hive_class_output2
000000_0
[cloudera@quickstart ~]$ ls /tmp/hive_class_output3
000000_0
[cloudera@quickstart ~]$
```

17. Perform partitioning on top of the agent column and then on top of that perform bucketing for each partitioning.

```
Found 49 items
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Aditya Shinde
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Aditya_iot
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Amersh
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Ameya Jain
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Ankitjha
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Anurag Tiwari
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Aravind
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Ayushi Mishra
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Bharath
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Boktiar Ahmed Bappy
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Chaitra K Hiremath
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Deepranjan Gupta
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Dibyanshu
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Harikrishnan Shaji
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Hrisikesh Neogi
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Hyder Abbas
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Ineuron Intelligence
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Ishawant Kumar
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Jawala Prakash
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Jaydeep Dixit
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Khushboo Priya
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Madhulika G
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Mahesh Sarade
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Maitry
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Manjunatha A
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Mithun S
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Mukesh
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Muskan Garg
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Nandani Gupta
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Nishtha Jain
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Nitin M
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Prabir Kumar Satapathy
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Prateek _iot
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Prerna Singh
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Rishav Dash
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Saikumarreddy N
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Sanjeev Kumar
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Saurabh Shukla
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Shiva Srivastava
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Shivan K
drwxrwxrwx   - cloudera supergroup          0 2022-10-07 00:26 /user/hive/warehouse/hive_class_a2.db/agent_login_dynamic_part/agent=Shivananda Sonwane
```