In [133]:

```
import pandas as pd
df1=pd.read_excel('AgentPerformance (1).xlsx',header=1)
df1
```

```
D:\swapna python\lib\site-packages\openpyxl\styles\stylesheet.py:226: UserWa
rning: Workbook contains no default style, apply openpyxl's default
  warn("Workbook contains no default style, apply openpyxl's default")
```

Out[133]:

	SL No	Date	Agent Name	Total Chats	Average Response Time	Average Resolution Time	Average Rating	Total Feedback
0	1	2022-07-30	Prerna Singh	11	00:00:38	00:04:20	4.11	9
1	2	2022-07-30	Nandani Gupta	11	00:01:15	00:28:25	3.14	7
2	3	2022-07-30	Ameya Jain	14	00:00:30	00:11:36	4.55	11
3	4	2022-07-30	Mahesh Sarade	14	00:01:04	00:15:46	4.71	7
4	5	2022-07-30	Swati	14	00:01:11	00:16:33	3.67	6
...	...	...	...	...	...	...	...	...
2155	2156	2022-07-01	Sowmiya Sivakumar	0	00:00:00	00:00:00	0.00	0
2156	2157	2022-07-01	Nitin M	0	00:00:00	00:00:00	0.00	0
2157	2158	2022-07-01	Vivek	0	00:00:00	00:00:00	0.00	0
2158	2159	2022-07-01	Ayushi Mishra	0	00:00:00	00:00:00	0.00	0
2159	2160	2022-07-01	Chaitra K Hiremath	0	00:00:00	00:00:00	0.00	0

2160 rows × 8 columns

In [134]:

```
df['cnvrtd_week']=pd.to_datetime(df1['Date']).dt.isocalendar().week
df1
```

Out[134]:

	SL No	Date	Agent Name	Total Chats	Average Response Time	Average Resolution Time	Average Rating	Total Feedback
0	1	2022-07-30	Prerna Singh	11	00:00:38	00:04:20	4.11	9
1	2	2022-07-30	Nandani Gupta	11	00:01:15	00:28:25	3.14	7
2	3	2022-07-30	Ameya Jain	14	00:00:30	00:11:36	4.55	11
3	4	2022-07-30	Mahesh Sarade	14	00:01:04	00:15:46	4.71	7
4	5	2022-07-30	Swati	14	00:01:11	00:16:33	3.67	6
...	...	...	...	...	...	...	...	...
2155	2156	2022-07-01	Sowmiya Sivakumar	0	00:00:00	00:00:00	0.00	0
2156	2157	2022-07-01	Nitin M	0	00:00:00	00:00:00	0.00	0
2157	2158	2022-07-01	Vivek	0	00:00:00	00:00:00	0.00	0
2158	2159	2022-07-01	Ayushi Mishra	0	00:00:00	00:00:00	0.00	0
2159	2160	2022-07-01	Chaitra K Hiremath	0	00:00:00	00:00:00	0.00	0

2160 rows × 8 columns

In [135]:

```
df2=pd.read_excel('Agent_Login_Report (4).xls',header=2)
df2
```

Out[135]:

	SL No	Agent	Date	Login Time	Logout Time	Duration
0	1	Shivananda Sonwane	30-Jul-22	03:35:29 PM	05:39:39 PM	02:04:10
1	2	Khushboo Priya	30-Jul-22	03:06:59 PM	03:07:16 PM	00:00:17
2	3	Nandani Gupta	30-Jul-22	03:04:24 PM	05:31:07 PM	02:26:42
3	4	Hrisikesh Neogi	30-Jul-22	02:34:29 PM	03:19:35 PM	00:45:06
4	5	Mukesh	30-Jul-22	02:03:15 PM	03:11:52 PM	01:08:36
...	...	...	...	...	...	...
995	996	Manjunatha A	20-Jul-22	09:03:51 AM	03:02:28 PM	05:58:37
996	997	Bharath	20-Jul-22	09:00:49 AM	03:01:32 PM	06:00:43
997	998	Khushboo Priya	20-Jul-22	08:59:20 AM	02:26:55 PM	05:27:34
998	999	Nishtha Jain	20-Jul-22	08:43:55 AM	02:00:33 PM	05:16:38
999	1000	Tarun	01-Jul-22	01:52:47 AM	12:01:07 PM	514:08:20

1000 rows × 6 columns

In [136]:

```
len(df2['Agent'].unique())
```

Out[136]:

```
49
```

In [137]:

```
#total query have taken
df1.groupby('Agent Name')['Total Chats'].sum()
```

Out[137]:

```
Agent Name
Abhishek           0
Aditya             0
Aditya Shinde    277
Aditya_iot       231
Amersh             0
                ...
Uday Mishra        0
Vasanth P          0
Vivek             44
Wasim            433
Zeeshan          542
Name: Total Chats, Length: 70, dtype: int64
```

In [138]:

```
#total feedback
df1.groupby('Agent Name')['Total Feedback'].sum()
```

Out[138]:

```
Agent Name
Abhishek           0
Aditya             0
Aditya Shinde    153
Aditya_iot       131
Amersh             0
                ...
Uday Mishra        0
Vasanth P          0
Vivek             20
Wasim            284
Zeeshan          335
Name: Total Feedback, Length: 70, dtype: int64
```

In [139]:

```
#working days
df1.groupby('Agent Name')['Date'].count()
```

Out[139]:

```
Agent Name
Abhishek         30
Aditya           30
Aditya Shinde    30
Aditya_iot       30
Amersh           30
                 ..
Uday Mishra      30
Vasanth P        30
Vivek            30
Wasim            30
Zeeshan          30
Name: Date, Length: 70, dtype: int64
```

In [140]:

```
#agent names whose average rating <3.5
df[df1['Average Rating'] <3.5]['Agent Name']
```

Out[140]:

```
1            Nandani Gupta
19         Hitesh Choudhary
20               Sanjeevan
21                 Anirudh
22         Shiva Srivastava
                  ...
2155     Sowmiya Sivakumar
2156                Nitin M
2157                 Vivek
2158          Ayushi Mishra
2159    Chaitra K Hiremath
Name: Agent Name, Length: 1474, dtype: object
```

In [141]:

```
#average rating on weekly basis
avg_rating=d/5
avg_rating
```

Out[141]:

```
Agent Name
Abhishek          6.0
Aditya            6.0
Aditya Shinde     6.0
Aditya_iot        6.0
Amersh            6.0
                 ...
Uday Mishra       6.0
Vasanth P         6.0
Vivek             6.0
Wasim             6.0
Zeeshan           6.0
Name: Date, Length: 70, dtype: float64
```

In [142]:

```
#agent name whose average rating >4.5
df[df1['Average Rating']>4.5]['Agent Name'].unique()
```

Out[142]:

```
array(['Ameya Jain', 'Mahesh Sarade', 'Mukesh ', 'Saikumarreddy N',
       'Sanjeev Kumar', 'Harikrishnan Shaji', 'Sowmiya Sivakumar',
       'Boktiar Ahmed Bappy', 'Shivananda Sonwane', 'Ishawant Kumar',
       'Deepranjan Gupta', 'Muskan Garg', 'Aditya_iot ',
       'Chaitra K Hiremath', 'Suraj S Bilgi', 'Mithun S', 'Wasim ',
       'Bharath ', 'Jawala Prakash', 'Ayushi Mishra', 'Prateek _iot ',
       'Nandani Gupta', 'Khushboo Priya', 'Manjunatha A', 'Maitry ',
       'Jaydeep Dixit', 'Madhulika G', 'Prerna Singh', 'Shivan K',
       'Shiva Srivastava', 'Swati ', 'Shubham Sharma', 'Aravind ',
       'Zeeshan ', 'Hrisikesh Neogi', 'Prabir Kumar Satapathy',
       'Rishav Dash', 'Sudhanshu Kumar', 'Aditya Shinde', 'Sandipan Saha',
       'Nishtha Jain', 'Saurabh Shukla', 'Anirudh ', 'Jayant Kumar',
       'Mukesh Rao ', 'Vivek ', 'Ankitjha '], dtype=object)
```

In [143]:

```
df1['avg_feedback']=df1['Total Feedback']/df1['Total Chats']*10
df1
```

Out[143]:

	SL No	Date	Agent Name	Total Chats	Average Response Time	Average Resolution Time	Average Rating	Total Feedback	avg_feedback
0	1	2022-07-30	Prerna Singh	11	00:00:38	00:04:20	4.11	9	8.181818
1	2	2022-07-30	Nandani Gupta	11	00:01:15	00:28:25	3.14	7	6.363636
2	3	2022-07-30	Ameya Jain	14	00:00:30	00:11:36	4.55	11	7.857143
3	4	2022-07-30	Mahesh Sarade	14	00:01:04	00:15:46	4.71	7	5.000000
4	5	2022-07-30	Swati	14	00:01:11	00:16:33	3.67	6	4.285714
...	...	...	...	...	...	...	...	...	...
2155	2156	2022-07-01	Sowmiya Sivakumar	0	00:00:00	00:00:00	0.00	0	NaN
2156	2157	2022-07-01	Nitin M	0	00:00:00	00:00:00	0.00	0	NaN
2157	2158	2022-07-01	Vivek	0	00:00:00	00:00:00	0.00	0	NaN
2158	2159	2022-07-01	Ayushi Mishra	0	00:00:00	00:00:00	0.00	0	NaN
2159	2160	2022-07-01	Chaitra K Hiremath	0	00:00:00	00:00:00	0.00	0	NaN

2160 rows × 9 columns

In [144]:

```
#number of agents whose avg feedback>4.5
len(df[df1['avg_feedback']>4.5]['Agent Name'].unique())
```

Out[144]:

```
52
```

In [145]:

```
#agent name whose avg feedback between 3.5,4
df[df1['avg_feedback'].between(3.5,4)]['Agent Name'].unique()
```

Out[145]:

```
array(['Chaitra K Hiremath', 'Aditya_iot ', 'Jawala Prakash',
       'Ishawant Kumar', 'Prateek _iot ', 'Shubham Sharma', 'Rishav Dash',
       'Khushboo Priya', 'Madhulika G', 'Nandani Gupta', 'Zeeshan ',
       'Mahesh Sarade', 'Prerna Singh', 'Nishtha Jain',
       'Harikrishnan Shaji', 'Jayant Kumar', 'Sanjeev Kumar',
       'Shivananda Sonwane'], dtype=object)
```

In [ ]:

```

```

In [146]:

```
#list of agent names
list=df2["Agent"].unique()
list
```

Out[146]:

```
array(['Shivananda Sonwane', 'Khushboo Priya', 'Nandani Gupta',
       'Hrisikesh Neogi', 'Mukesh ', 'Sowmiya Sivakumar', 'Manjunatha A',
       'Harikrishnan Shaji', 'Suraj S Bilgi', 'Shivan K', 'Anurag Tiwari',
       'Ishawant Kumar', 'Shubham Sharma', 'Prerna Singh', 'Nishtha Jain',
       'Prateek _iot ', 'Mithun S', 'Madhulika G', 'Boktiar Ahmed Bappy',
       'Jawala Prakash', 'Dibyanshu ', 'Deepranjan Gupta',
       'Jaydeep Dixit', 'Ayushi Mishra', 'Mahesh Sarade', 'Muskan Garg',
       'Chaitra K Hiremath', 'Shiva Srivastava', 'Aditya_iot ',
       'Prabir Kumar Satapathy', 'Sanjeev Kumar', 'Zeeshan ',
       'Rishav Dash', 'Wasim ', 'Bharath ', 'Ameya Jain',
       'Saikumarreddy N', 'Aravind ', 'Amersh ', 'Sudhanshu Kumar',
       'Ankitjha ', 'Maitry ', 'Aditya Shinde', 'Hyder Abbas', 'Swati ',
       'Saurabh Shukla', 'Nitin M', 'Ineuron Intelligence ', 'Tarun '],
      dtype=object)
```

In [ ]:

```

```