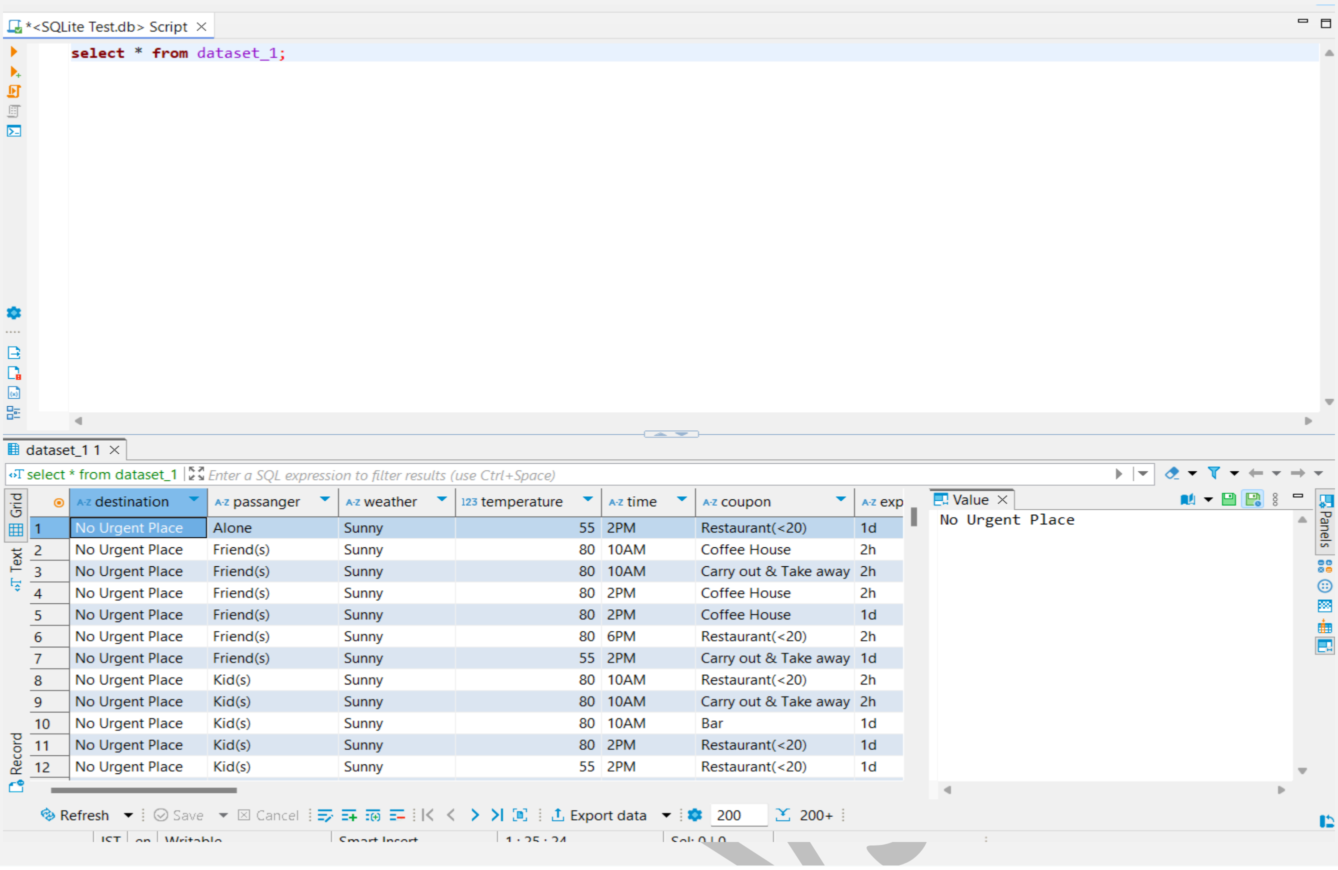
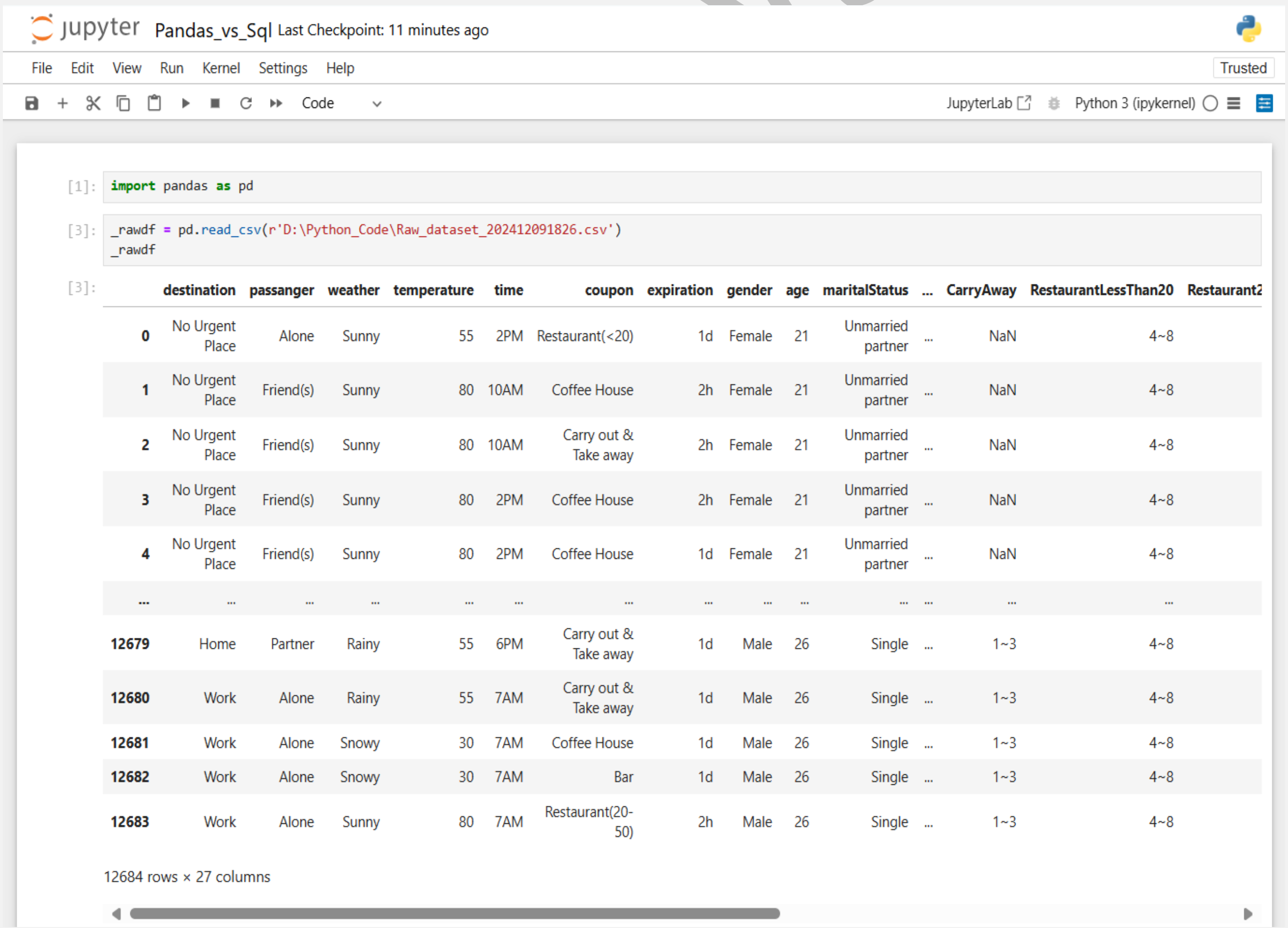


```
select * from dataset_1;
```

	destination	passanger	weather	temperature	time	coupon	exp
1	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h
3	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h
4	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h
5	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d
6	No Urgent Place	Friend(s)	Sunny	80	6PM	Restaurant(<20)	2h
7	No Urgent Place	Friend(s)	Sunny	55	2PM	Carry out & Take away	1d
8	No Urgent Place	Kid(s)	Sunny	80	10AM	Restaurant(<20)	2h
9	No Urgent Place	Kid(s)	Sunny	80	10AM	Carry out & Take away	2h
10	No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d
11	No Urgent Place	Kid(s)	Sunny	80	2PM	Restaurant(<20)	1d
12	No Urgent Place	Kid(s)	Sunny	55	2PM	Restaurant(<20)	1d

Value: No Urgent Place



```
[1]: import pandas as pd
```

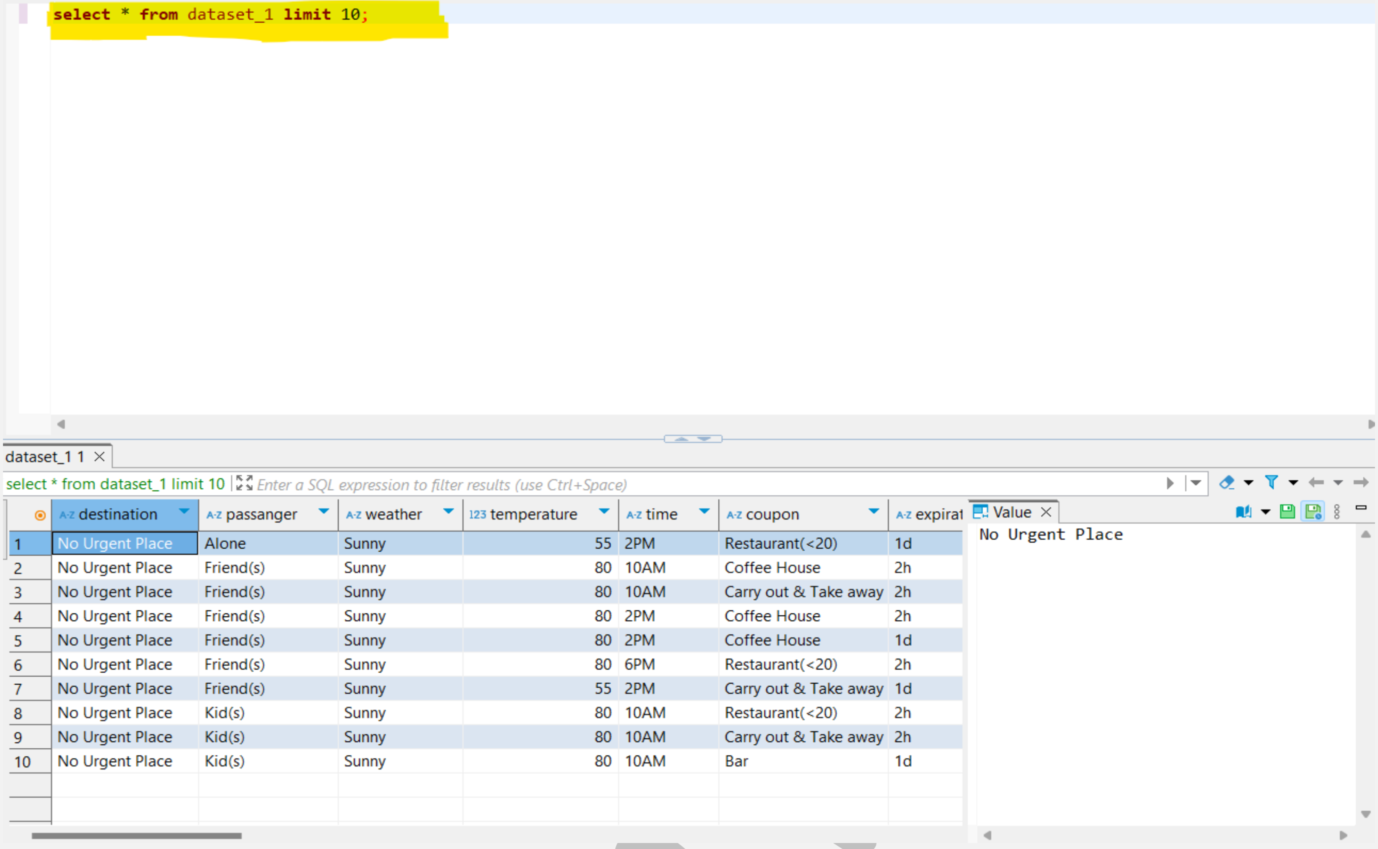
```
[3]: _rawdf = pd.read_csv(r'D:\Python_Code\Raw_dataset_202412091826.csv')
     _rawdf
```

[3]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant2
0	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Female	21	Unmarried partner	...	NaN	4~8	
1	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	
3	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	
4	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d	Female	21	Unmarried partner	...	NaN	4~8	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12679	Home	Partner	Rainy	55	6PM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12680	Work	Alone	Rainy	55	7AM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12681	Work	Alone	Snowy	30	7AM	Coffee House	1d	Male	26	Single	...	1~3	4~8	
12682	Work	Alone	Snowy	30	7AM	Bar	1d	Male	26	Single	...	1~3	4~8	
12683	Work	Alone	Sunny	80	7AM	Restaurant(20-50)	2h	Male	26	Single	...	1~3	4~8	

12684 rows × 27 columns

Get 10 records from the dataset in sqllite:



```
select * from dataset_1 limit 10;
```

dataset_1 1

select * from dataset_1 limit 10 | Enter a SQL expression to filter results (use Ctrl+Space)

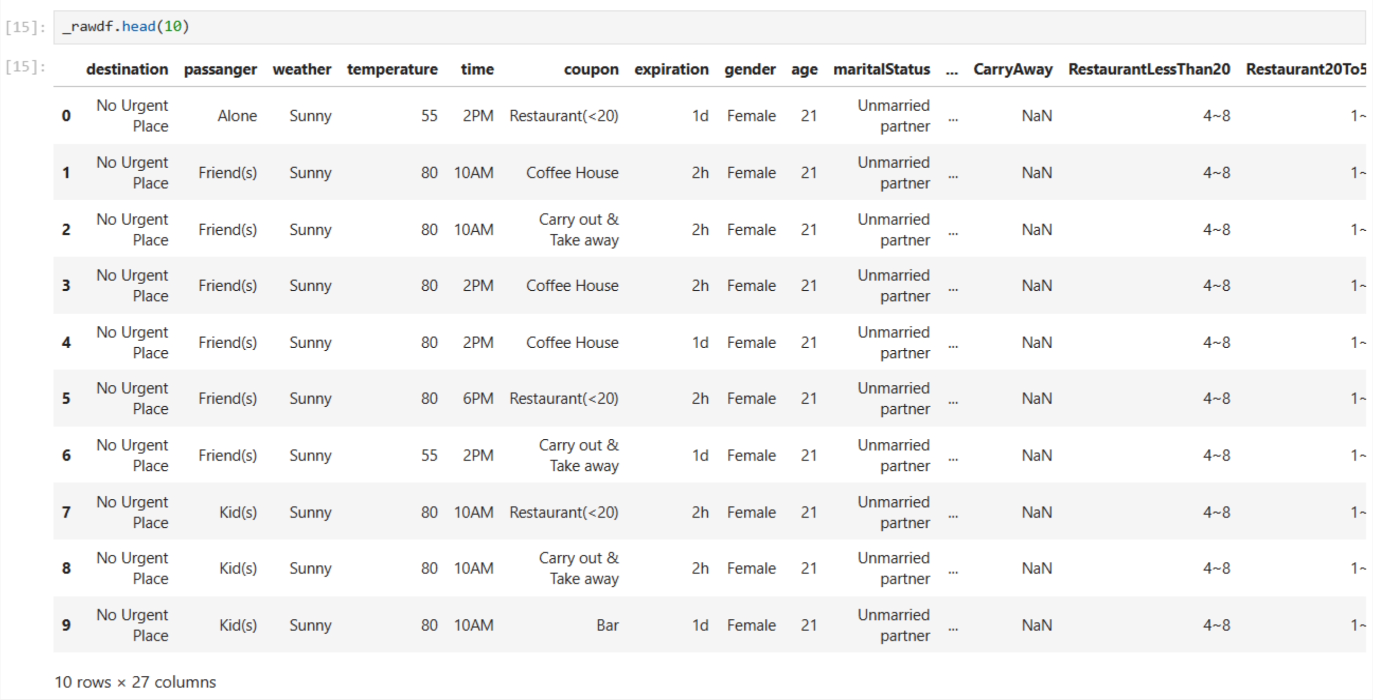
	destination	passanger	weather	temperature	time	coupon	expirat
1	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h
3	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h
4	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h
5	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d
6	No Urgent Place	Friend(s)	Sunny	80	6PM	Restaurant(<20)	2h
7	No Urgent Place	Friend(s)	Sunny	55	2PM	Carry out & Take away	1d
8	No Urgent Place	Kid(s)	Sunny	80	10AM	Restaurant(<20)	2h
9	No Urgent Place	Kid(s)	Sunny	80	10AM	Carry out & Take away	2h
10	No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d

Value

No Urgent Place

Python: we can use

head(10) to get top 10, tail(10) to get bottom 10 or slicing [:]

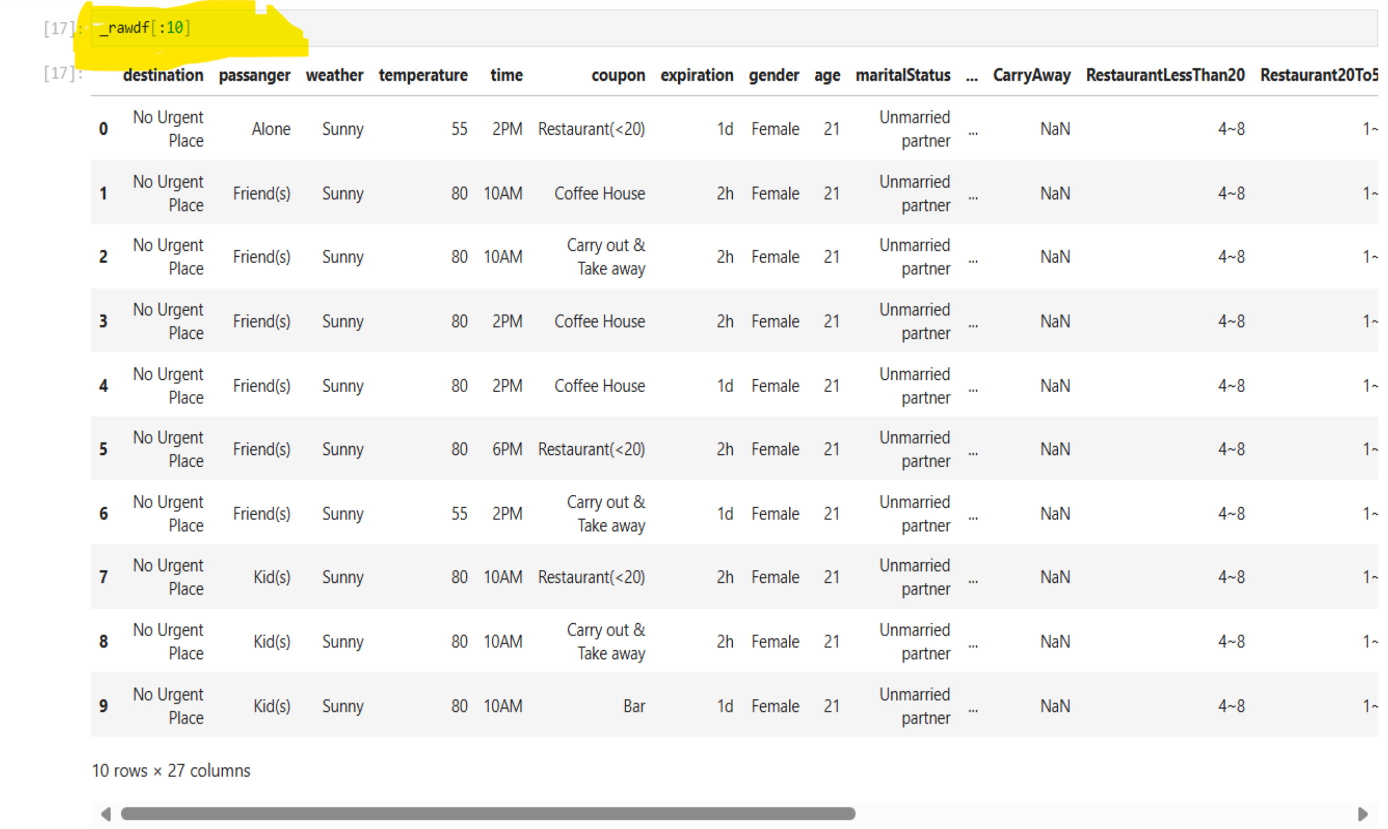


```
[15]: _rawdf.head(10)
```

[15]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant20To5
0	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Female	21	Unmarried partner	...	NaN	4~8	1~
1	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
3	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
4	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d	Female	21	Unmarried partner	...	NaN	4~8	1~
5	No Urgent Place	Friend(s)	Sunny	80	6PM	Restaurant(<20)	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
6	No Urgent Place	Friend(s)	Sunny	55	2PM	Carry out & Take away	1d	Female	21	Unmarried partner	...	NaN	4~8	1~
7	No Urgent Place	Kid(s)	Sunny	80	10AM	Restaurant(<20)	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
8	No Urgent Place	Kid(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
9	No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d	Female	21	Unmarried partner	...	NaN	4~8	1~

10 rows × 27 columns

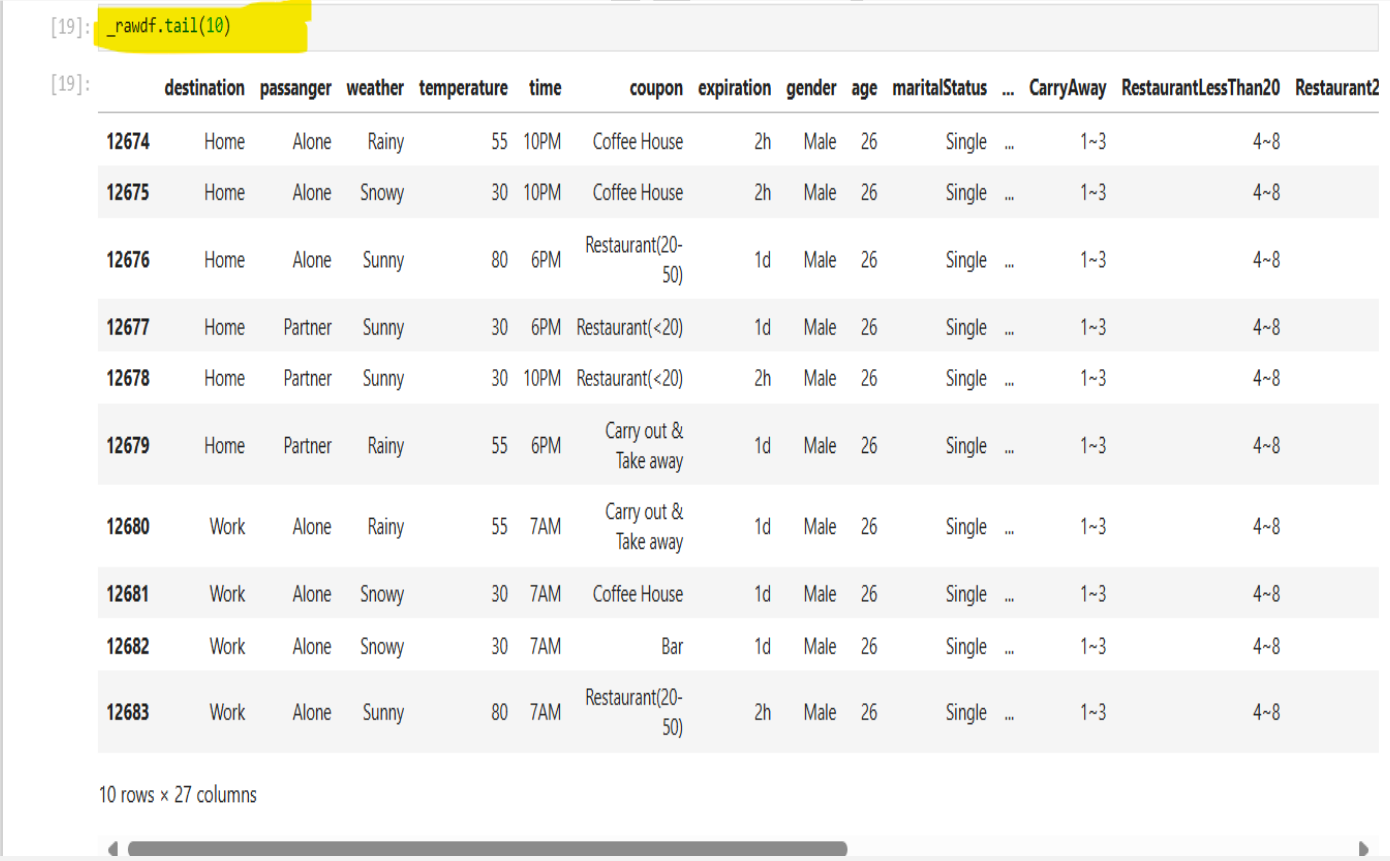


```
[17]: _rawdf[:10]
```

[17]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant20To5
0	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Female	21	Unmarried partner	...	NaN	4~8	1~
1	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
3	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
4	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d	Female	21	Unmarried partner	...	NaN	4~8	1~
5	No Urgent Place	Friend(s)	Sunny	80	6PM	Restaurant(<20)	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
6	No Urgent Place	Friend(s)	Sunny	55	2PM	Carry out & Take away	1d	Female	21	Unmarried partner	...	NaN	4~8	1~
7	No Urgent Place	Kid(s)	Sunny	80	10AM	Restaurant(<20)	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
8	No Urgent Place	Kid(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	1~
9	No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d	Female	21	Unmarried partner	...	NaN	4~8	1~

10 rows × 27 columns



```
[19]: _rawdf.tail(10)
```

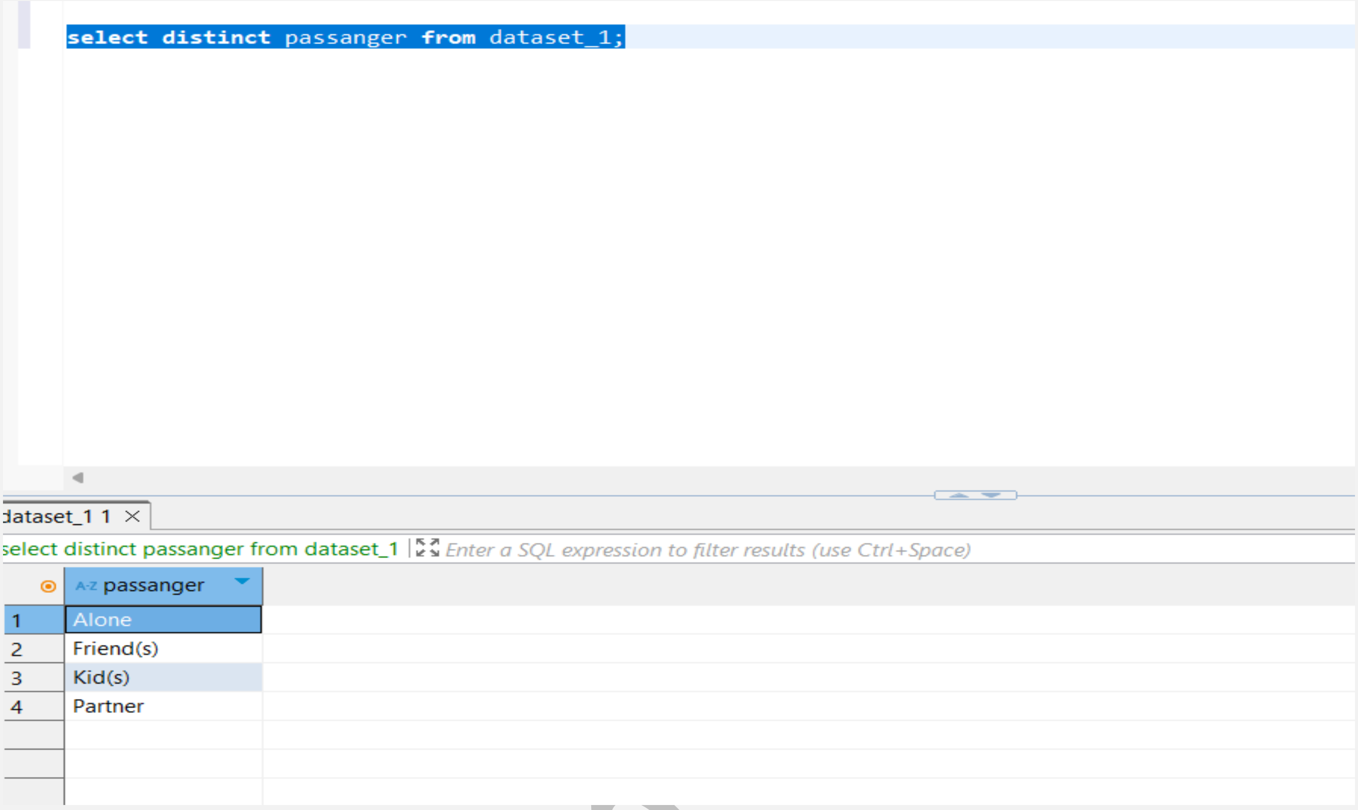
[19]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant2
12674	Home	Alone	Rainy	55	10PM	Coffee House	2h	Male	26	Single	...	1~3	4~8	
12675	Home	Alone	Snowy	30	10PM	Coffee House	2h	Male	26	Single	...	1~3	4~8	
12676	Home	Alone	Sunny	80	6PM	Restaurant(20-50)	1d	Male	26	Single	...	1~3	4~8	
12677	Home	Partner	Sunny	30	6PM	Restaurant(<20)	1d	Male	26	Single	...	1~3	4~8	
12678	Home	Partner	Sunny	30	10PM	Restaurant(<20)	2h	Male	26	Single	...	1~3	4~8	
12679	Home	Partner	Rainy	55	6PM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12680	Work	Alone	Rainy	55	7AM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12681	Work	Alone	Snowy	30	7AM	Coffee House	1d	Male	26	Single	...	1~3	4~8	
12682	Work	Alone	Snowy	30	7AM	Bar	1d	Male	26	Single	...	1~3	4~8	
12683	Work	Alone	Sunny	80	7AM	Restaurant(20-50)	2h	Male	26	Single	...	1~3	4~8	

10 rows × 27 columns

Distinct: Gets the unique value from the attribute.

select distinct passanger **from** dataset_1;



```
select distinct passanger from dataset_1;
```

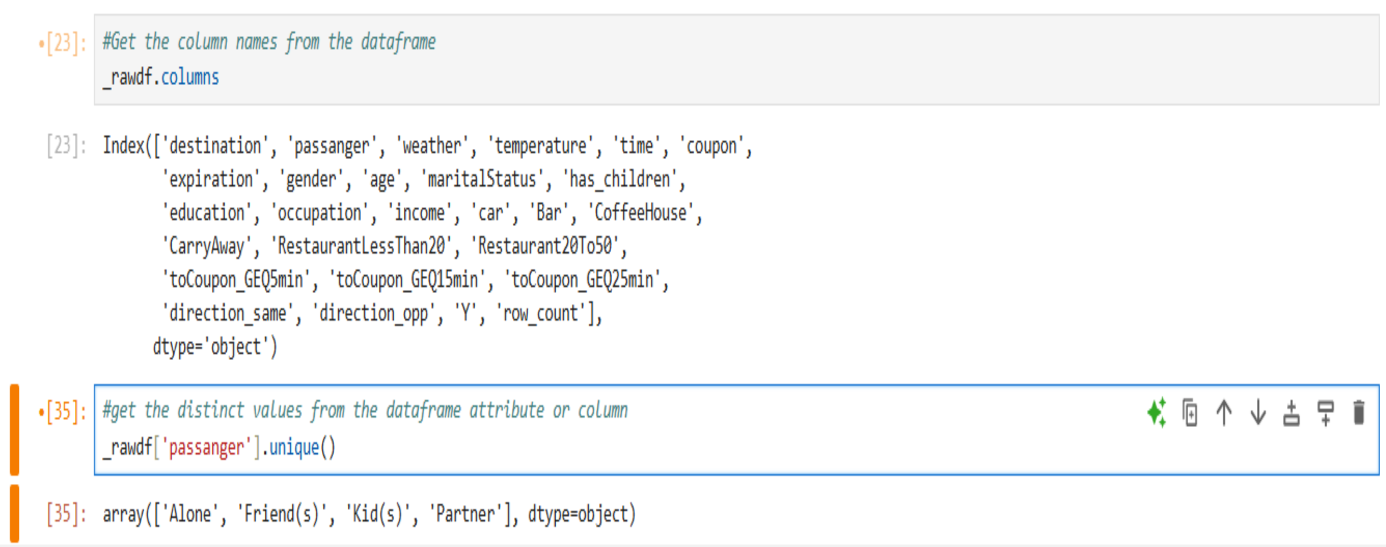
select distinct passanger from dataset_1
Enter a SQL expression to filter results (use Ctrl+Space)

	passanger
1	Alone
2	Friend(s)
3	Kid(s)
4	Partner

Python:

#Get the column names from the dataframe
_rawdf.columns

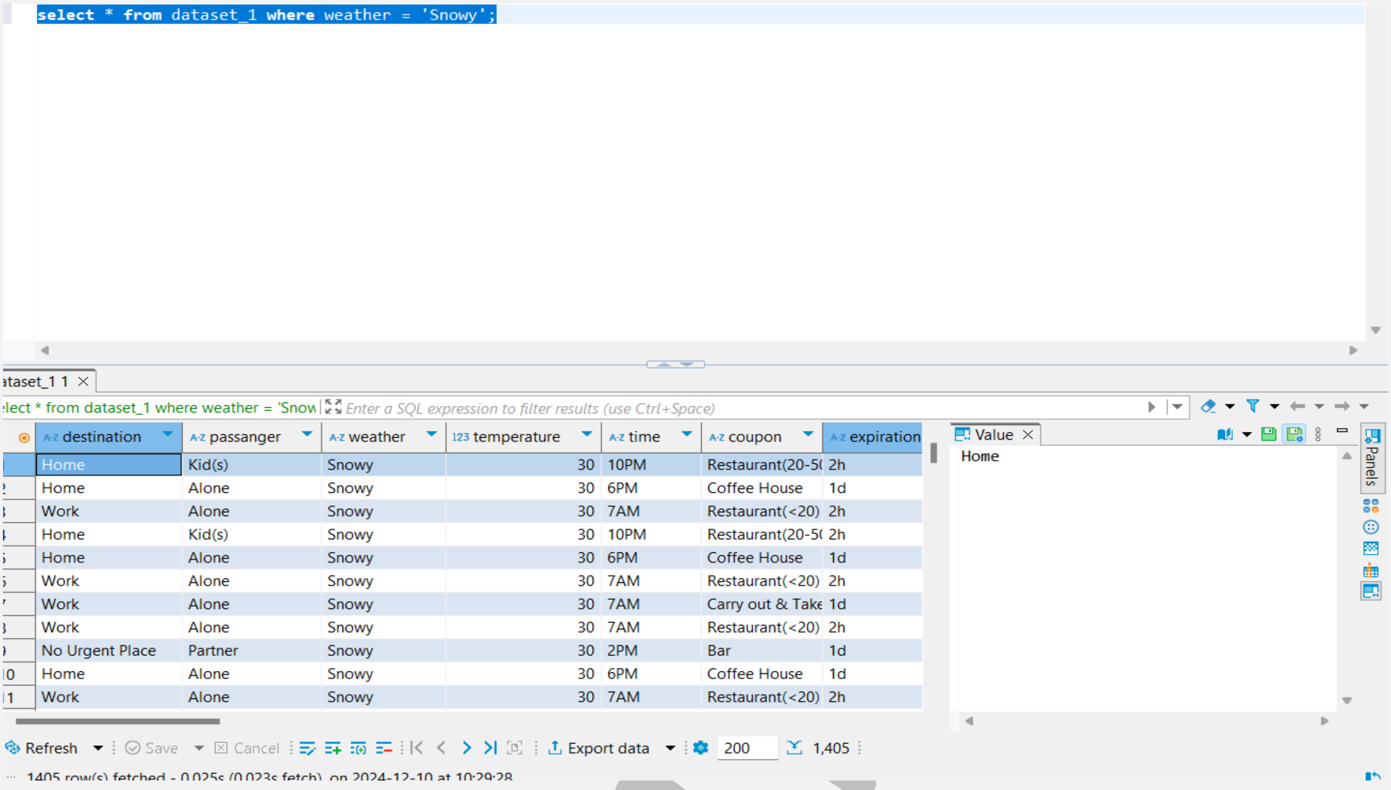
#get the distinct values from the dataframe attribute or column
_rawdf['passanger'].unique()



```
[23]: #Get the column names from the dataframe
      _rawdf.columns

[23]: Index(['destination', 'passanger', 'weather', 'temperature', 'time', 'coupon',
             'expiration', 'gender', 'age', 'maritalStatus', 'has_children',
             'education', 'occupation', 'income', 'car', 'Bar', 'CoffeeHouse',
             'CarryAway', 'RestaurantLessThan20', 'Restaurant20To50',
             'toCoupon_GEQ5min', 'toCoupon_GEQ15min', 'toCoupon_GEQ25min',
             'direction_same', 'direction_opp', 'Y', 'row_count'],
            dtype='object')

[35]: #get the distinct values from the dataframe attribute or column
      _rawdf['passanger'].unique()

[35]: array(['Alone', 'Friend(s)', 'Kid(s)', 'Partner'], dtype=object)
```

Apply condition to attribute in sqllite:

select * from dataset_1 where weather = 'Snowy';



```
select * from dataset_1 where weather = 'Snowy';
```

ataset_1 1
elect * from dataset_1 where weather = 'Snow
Enter a SQL expression to filter results (use Ctrl+Space)
Value
Panels

destination	passanger	weather	temperature	time	coupon	expiration
Home	Kid(s)	Snowy	30	10PM	Restaurant(20-5(	2h
Home	Alone	Snowy	30	6PM	Coffee House	1d
Work	Alone	Snowy	30	7AM	Restaurant(<20)	2h
Home	Kid(s)	Snowy	30	10PM	Restaurant(20-5(	2h
Home	Alone	Snowy	30	6PM	Coffee House	1d
Work	Alone	Snowy	30	7AM	Restaurant(<20)	2h
Work	Alone	Snowy	30	7AM	Carry out & Take	1d
Work	Alone	Snowy	30	7AM	Restaurant(<20)	2h
No Urgent Place	Partner	Snowy	30	2PM	Bar	1d
Home	Alone	Snowy	30	6PM	Coffee House	1d
Work	Alone	Snowy	30	7AM	Restaurant(<20)	2h

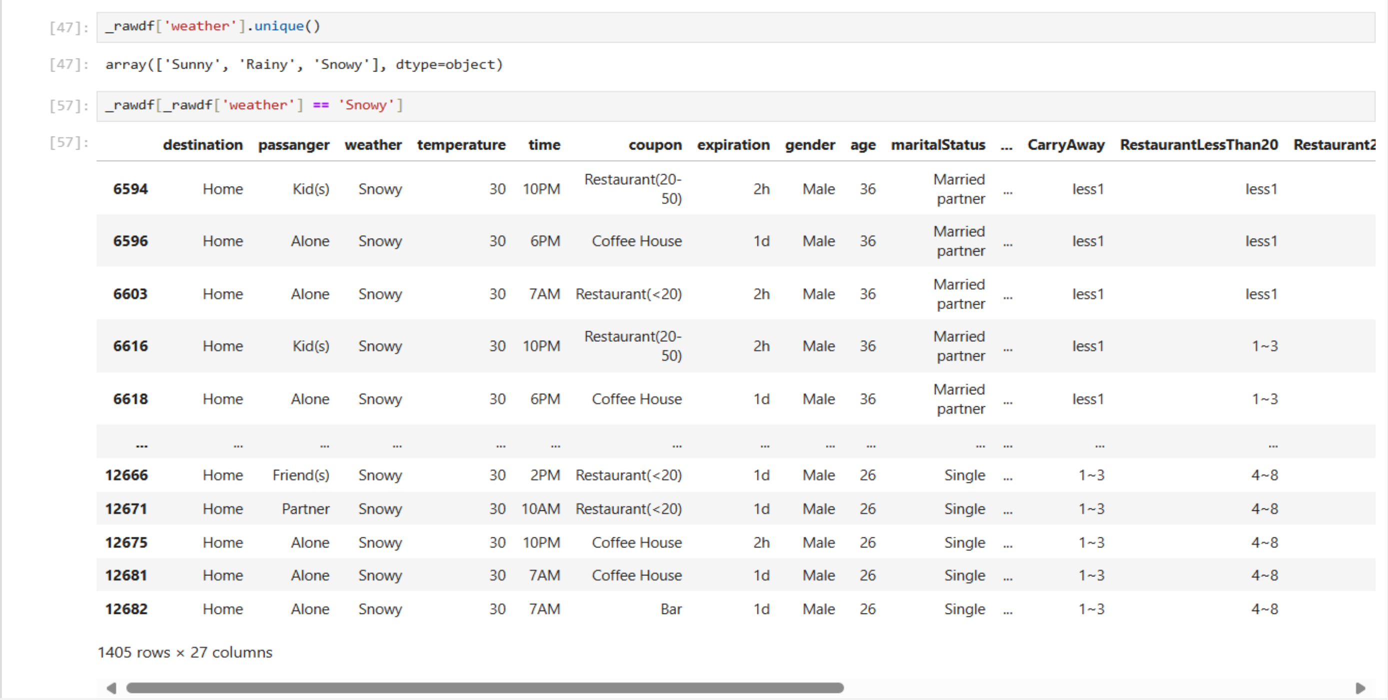
Value: Home

1405 row(s) fetched - 0.025s (0.023s fetch), on 2024-12-10 at 10:29:28

Python:

_rawdf['weather'].unique()

_rawdf[_rawdf['weather'] == 'Snowy']



```
[47]: _rawdf['weather'].unique()

[47]: array(['Sunny', 'Rainy', 'Snowy'], dtype=object)

[57]: _rawdf[_rawdf['weather'] == 'Snowy']
```

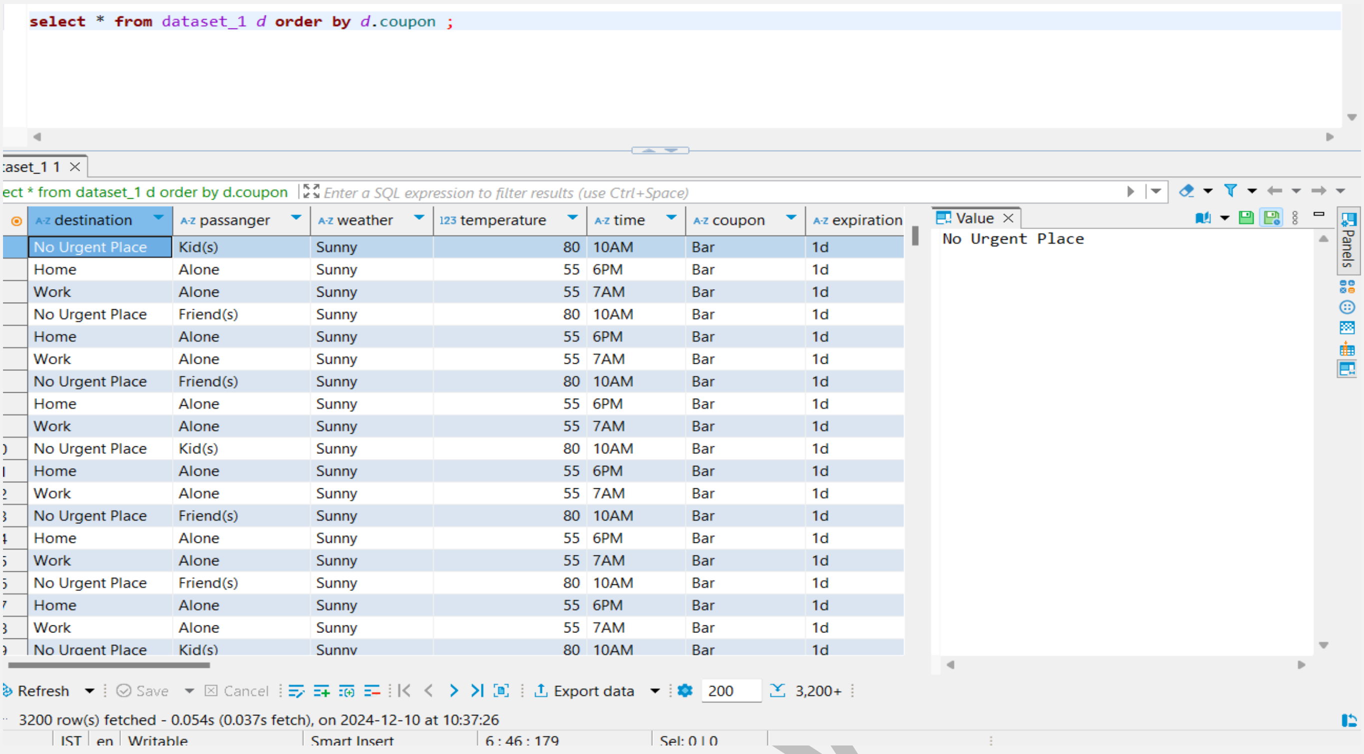
[57]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant2
6594	Home	Kid(s)	Snowy	30	10PM	Restaurant(20-50)	2h	Male	36	Married partner	...	less1	less1	
6596	Home	Alone	Snowy	30	6PM	Coffee House	1d	Male	36	Married partner	...	less1	less1	
6603	Home	Alone	Snowy	30	7AM	Restaurant(<20)	2h	Male	36	Married partner	...	less1	less1	
6616	Home	Kid(s)	Snowy	30	10PM	Restaurant(20-50)	2h	Male	36	Married partner	...	less1	1~3	
6618	Home	Alone	Snowy	30	6PM	Coffee House	1d	Male	36	Married partner	...	less1	1~3	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12666	Home	Friend(s)	Snowy	30	2PM	Restaurant(<20)	1d	Male	26	Single	...	1~3	4~8	
12671	Home	Partner	Snowy	30	10AM	Restaurant(<20)	1d	Male	26	Single	...	1~3	4~8	
12675	Home	Alone	Snowy	30	10PM	Coffee House	2h	Male	26	Single	...	1~3	4~8	
12681	Home	Alone	Snowy	30	7AM	Coffee House	1d	Male	26	Single	...	1~3	4~8	
12682	Home	Alone	Snowy	30	7AM	Bar	1d	Male	26	Single	...	1~3	4~8	

1405 rows × 27 columns

Sqllite:

select * from dataset_1 *d* order by *d*.coupon ;



```
select * from dataset_1 d order by d.coupon ;
```

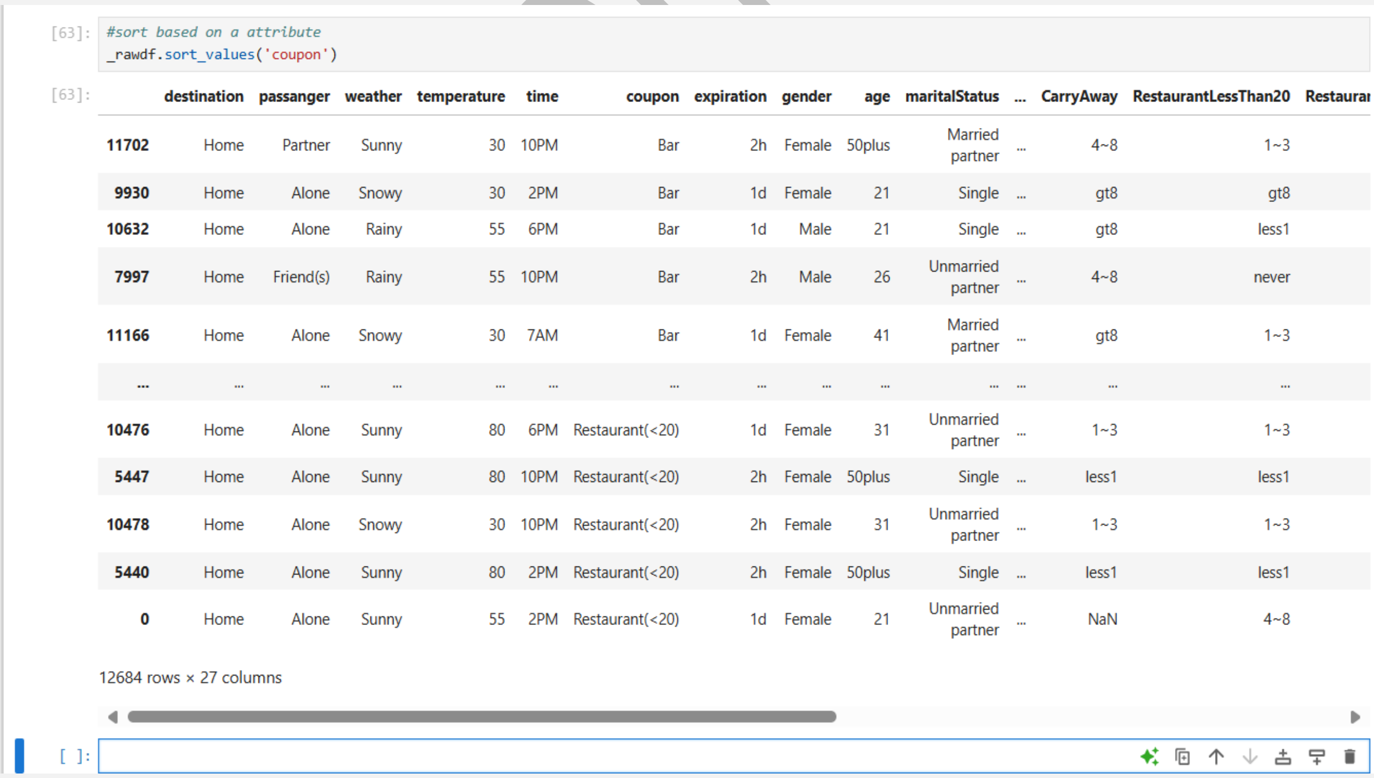
:aset_1 1 ×
ect * from dataset_1 d order by d.coupon
Enter a SQL expression to filter results (use Ctrl+Space)
Value
Panels
Refresh
Save
Cancel
Export data
200
3,200+

destination	passanger	weather	temperature	time	coupon	expiration
No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d
Home	Alone	Sunny	55	6PM	Bar	1d
Work	Alone	Sunny	55	7AM	Bar	1d
No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d
Home	Alone	Sunny	55	6PM	Bar	1d
Work	Alone	Sunny	55	7AM	Bar	1d
No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d
Home	Alone	Sunny	55	6PM	Bar	1d
Work	Alone	Sunny	55	7AM	Bar	1d
No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d
Home	Alone	Sunny	55	6PM	Bar	1d
Work	Alone	Sunny	55	7AM	Bar	1d
No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d
Home	Alone	Sunny	55	6PM	Bar	1d
Work	Alone	Sunny	55	7AM	Bar	1d
No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d
Home	Alone	Sunny	55	6PM	Bar	1d
Work	Alone	Sunny	55	7AM	Bar	1d
No Urgent Place	Kid(s)	Sunny	80	10AM	Bar	1d

```
No Urgent Place
```

```
3200 row(s) fetched - 0.054s (0.037s fetch), on 2024-12-10 at 10:37:26
IST | en | Writable | Smart Insert | 6 : 46 : 179 | Sel: 0 | 0
```

#sort based on a attribute
_rawdf.sort_values('coupon')



```
[63]: #sort based on a attribute
      _rawdf.sort_values('coupon')
```

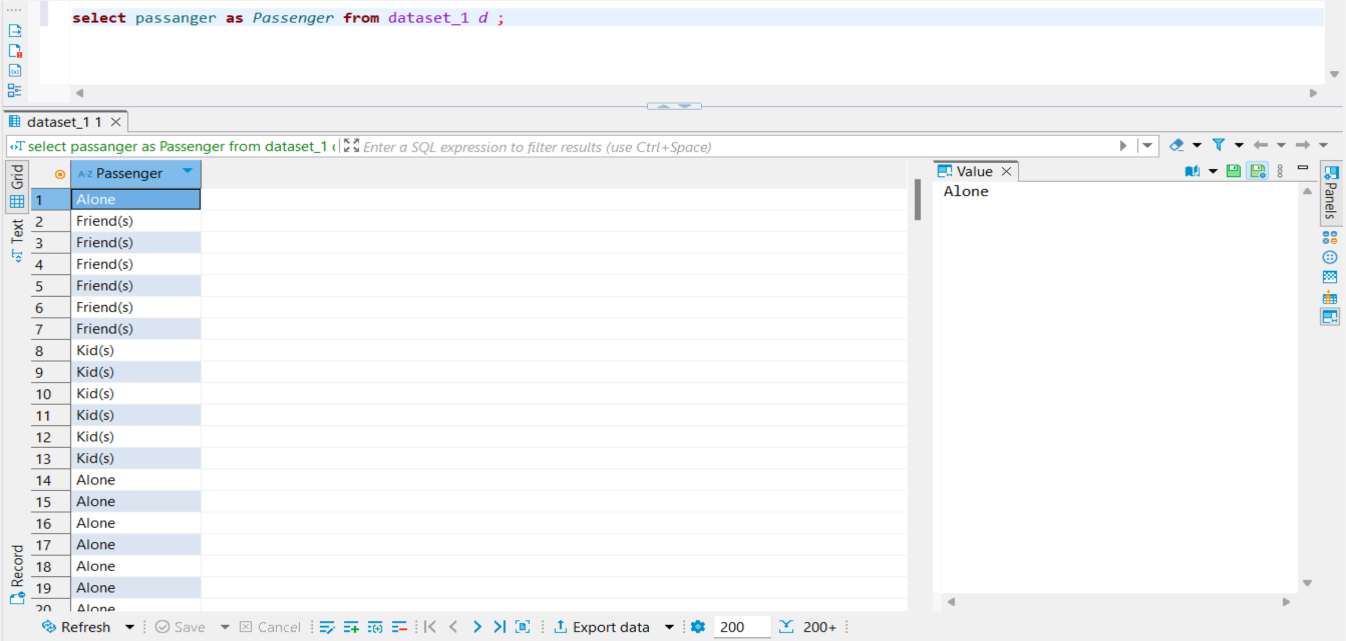
[63]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaura
11702	Home	Partner	Sunny	30	10PM	Bar	2h	Female	50plus	Married partner	...	4~8	1~3	
9930	Home	Alone	Snowy	30	2PM	Bar	1d	Female	21	Single	...	gt8	gt8	
10632	Home	Alone	Rainy	55	6PM	Bar	1d	Male	21	Single	...	gt8	less1	
7997	Home	Friend(s)	Rainy	55	10PM	Bar	2h	Male	26	Unmarried partner	...	4~8	never	
11166	Home	Alone	Snowy	30	7AM	Bar	1d	Female	41	Married partner	...	gt8	1~3	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
10476	Home	Alone	Sunny	80	6PM	Restaurant(<20)	1d	Female	31	Unmarried partner	...	1~3	1~3	
5447	Home	Alone	Sunny	80	10PM	Restaurant(<20)	2h	Female	50plus	Single	...	less1	less1	
10478	Home	Alone	Snowy	30	10PM	Restaurant(<20)	2h	Female	31	Unmarried partner	...	1~3	1~3	
5440	Home	Alone	Sunny	80	2PM	Restaurant(<20)	2h	Female	50plus	Single	...	less1	less1	
0	Home	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Female	21	Unmarried partner	...	NaN	4~8	

12684 rows × 27 columns

Alias Name/ Rename a Column:

select passanger as *Passenger* from dataset_1 *d* ;



```
select passanger as Passenger from dataset_1 d ;
```

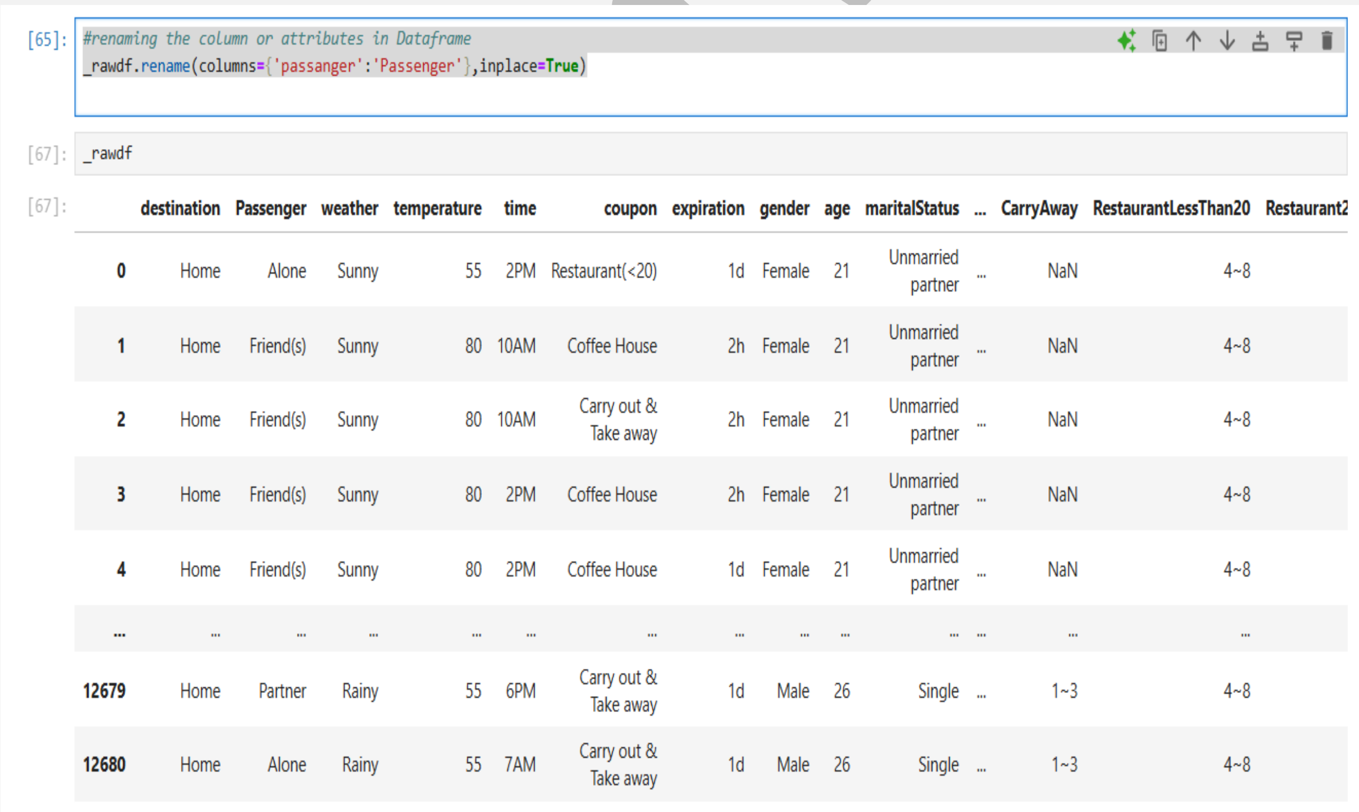
dataset_1 1
select passanger as Passenger from dataset_1 d
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Record
Value
Panels
Refresh
Save
Cancel
Export data
200
200+

	Passenger
1	Alone
2	Friend(s)
3	Friend(s)
4	Friend(s)
5	Friend(s)
6	Friend(s)
7	Friend(s)
8	Kid(s)
9	Kid(s)
10	Kid(s)
11	Kid(s)
12	Kid(s)
13	Kid(s)
14	Alone
15	Alone
16	Alone
17	Alone
18	Alone
19	Alone
20	Alone

Value: Alone

#renaming the column or attributes in Dataframe

_rawdf.rename(columns={'passanger':'Passenger'},inplace=True)



```
[65]: #renaming the column or attributes in Dataframe
      _rawdf.rename(columns={'passanger':'Passenger'},inplace=True)
```

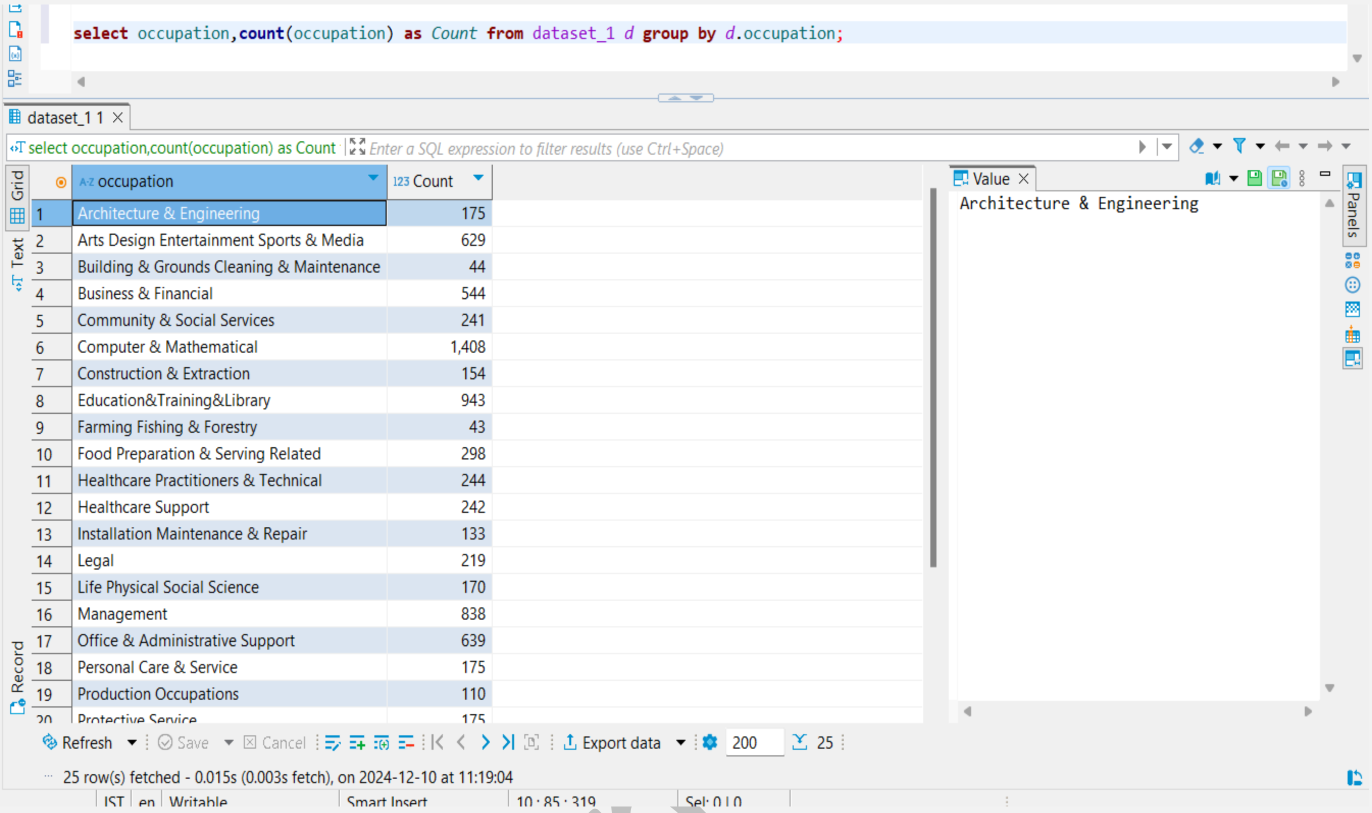
```
[67]: _rawdf
```

[67]:

	destination	Passenger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant2
0	Home	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Female	21	Unmarried partner	...	NaN	4~8	
1	Home	Friend(s)	Sunny	80	10AM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	
2	Home	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	
3	Home	Friend(s)	Sunny	80	2PM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	
4	Home	Friend(s)	Sunny	80	2PM	Coffee House	1d	Female	21	Unmarried partner	...	NaN	4~8	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12679	Home	Partner	Rainy	55	6PM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12680	Home	Alone	Rainy	55	7AM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	

Groupby:

select occupation,**count**(occupation) **as** *Count* **from** dataset_1 *d* **group by** *d*.occupation;



```
select occupation,count(occupation) as Count from dataset_1 d group by d.occupation;
```

dataset_1 1
select occupation,count(occupation) as Count
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Record
Value
Panels

	occupation	Count
1	Architecture & Engineering	175
2	Arts Design Entertainment Sports & Media	629
3	Building & Grounds Cleaning & Maintenance	44
4	Business & Financial	544
5	Community & Social Services	241
6	Computer & Mathematical	1,408
7	Construction & Extraction	154
8	Education&Training&Library	943
9	Farming Fishing & Forestry	43
10	Food Preparation & Serving Related	298
11	Healthcare Practitioners & Technical	244
12	Healthcare Support	242
13	Installation Maintenance & Repair	133
14	Legal	219
15	Life Physical Social Science	170
16	Management	838
17	Office & Administrative Support	639
18	Personal Care & Service	175
19	Production Occupations	110
20	Protective Service	175

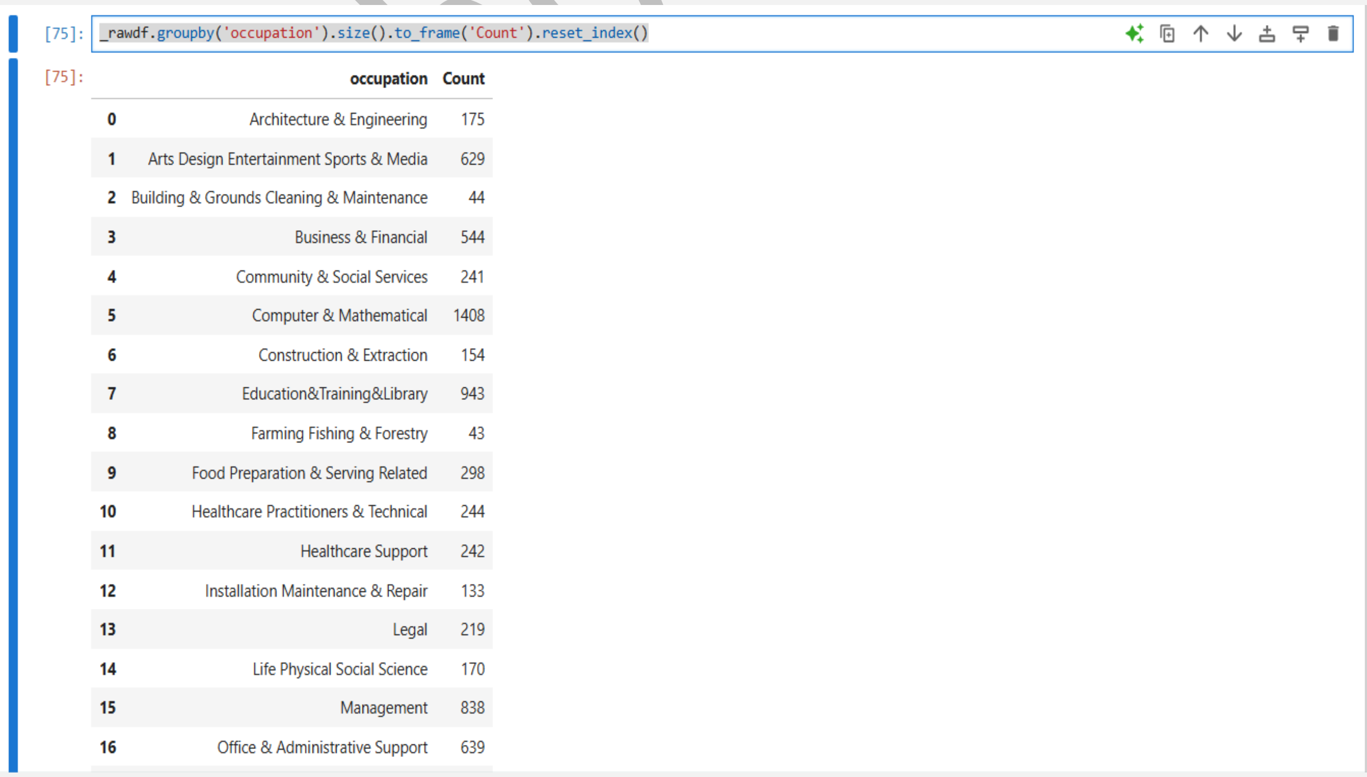
Architecture & Engineering

25 row(s) fetched - 0.015s (0.003s fetch), on 2024-12-10 at 11:19:04

IST | en | Writable | Smart Insert | 10 : 85 : 319 | Sel: 0 | 0

Python:

_rawdf.groupby('occupation').size().to_frame('Count').reset_index()



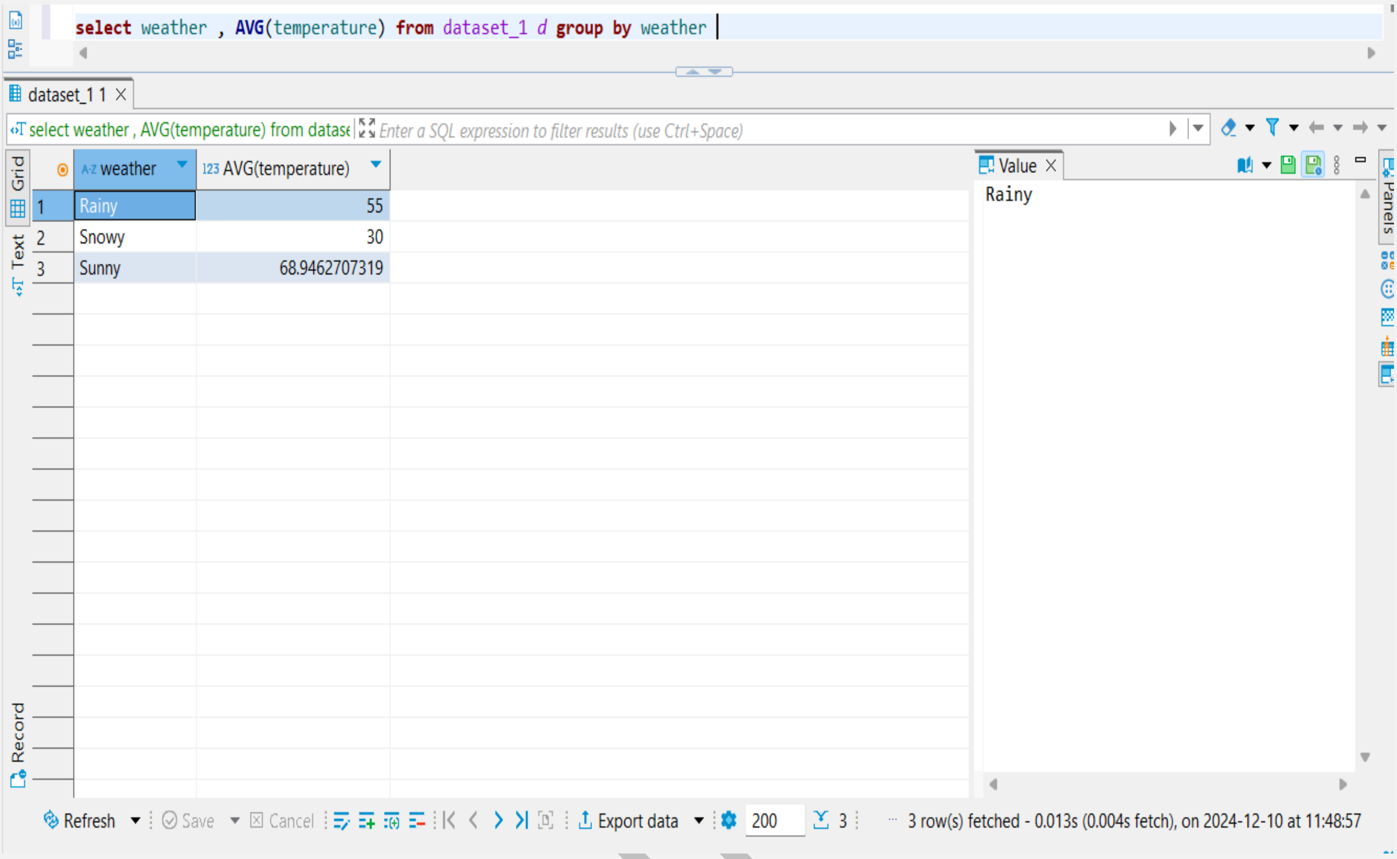
```
[75]: _rawdf.groupby('occupation').size().to_frame('Count').reset_index()
```

[75]:

	occupation	Count
0	Architecture & Engineering	175
1	Arts Design Entertainment Sports & Media	629
2	Building & Grounds Cleaning & Maintenance	44
3	Business & Financial	544
4	Community & Social Services	241
5	Computer & Mathematical	1408
6	Construction & Extraction	154
7	Education&Training&Library	943
8	Farming Fishing & Forestry	43
9	Food Preparation & Serving Related	298
10	Healthcare Practitioners & Technical	244
11	Healthcare Support	242
12	Installation Maintenance & Repair	133
13	Legal	219
14	Life Physical Social Science	170
15	Management	838
16	Office & Administrative Support	639

Groupby:

select weather , AVG(temperature) from dataset_1 *d* group by weather



```
select weather , AVG(temperature) from dataset_1 d group by weather
```

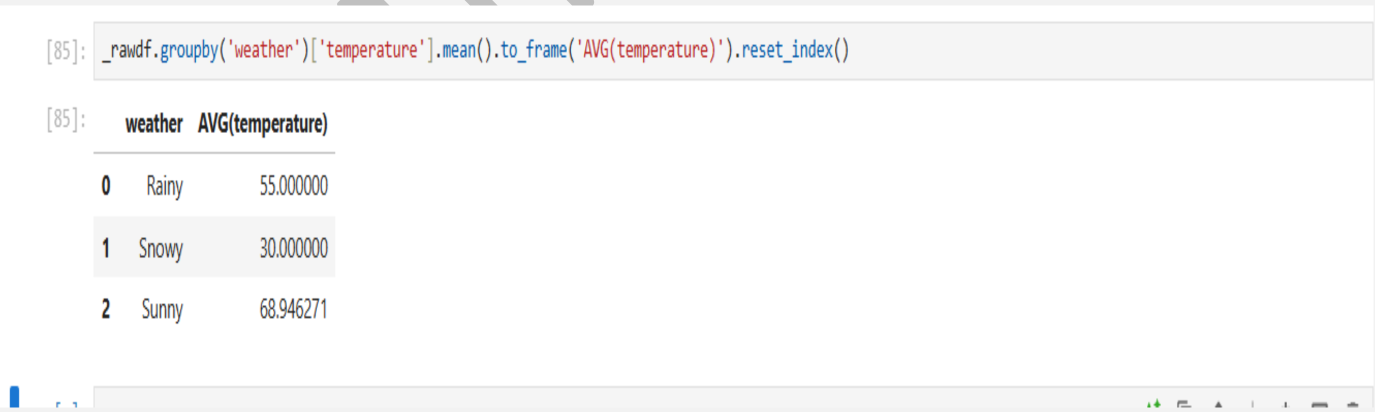
	weather	AVG(temperature)
1	Rainy	55
2	Snowy	30
3	Sunny	68.9462707319

Value: Rainy

3 row(s) fetched - 0.013s (0.004s fetch), on 2024-12-10 at 11:48:57

Python:

_rawdf.groupby('weather')['temperature'].mean().to_frame('AVG(temperature)').reset_index()



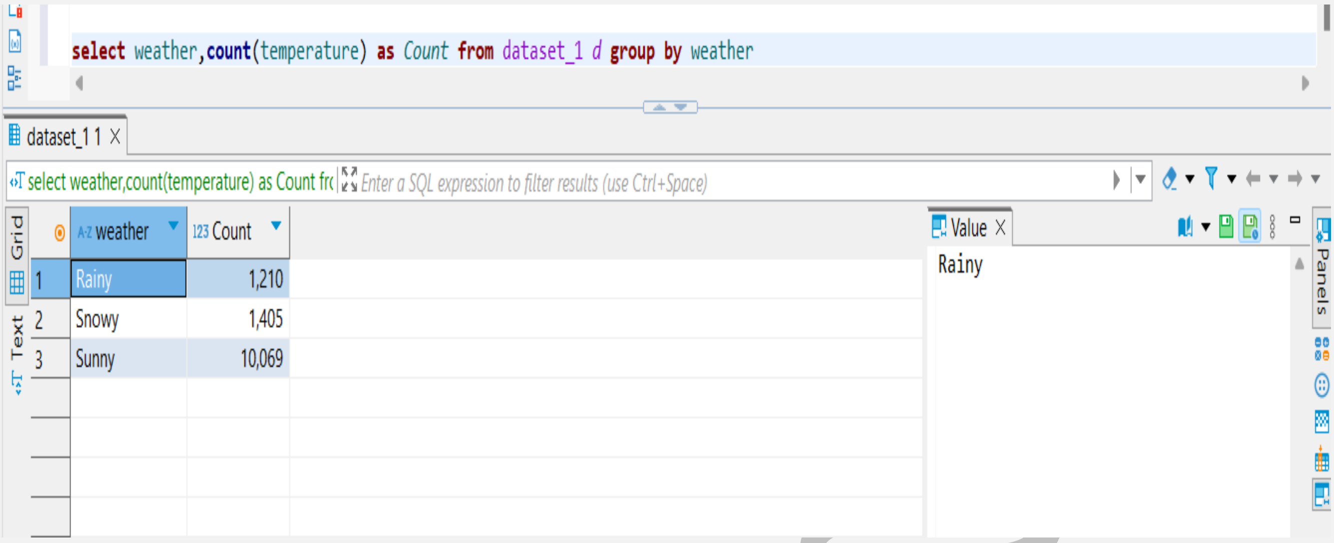
```
[85]: _rawdf.groupby('weather')['temperature'].mean().to_frame('AVG(temperature)').reset_index()
```

[85]:

	weather	AVG(temperature)
0	Rainy	55.000000
1	Snowy	30.000000
2	Sunny	68.946271

Groupby:

select weather,**count**(temperature) **as** *Count* **from** dataset_1 *d* **group by** weather



```
select weather,count(temperature) as Count from dataset_1 d group by weather
```

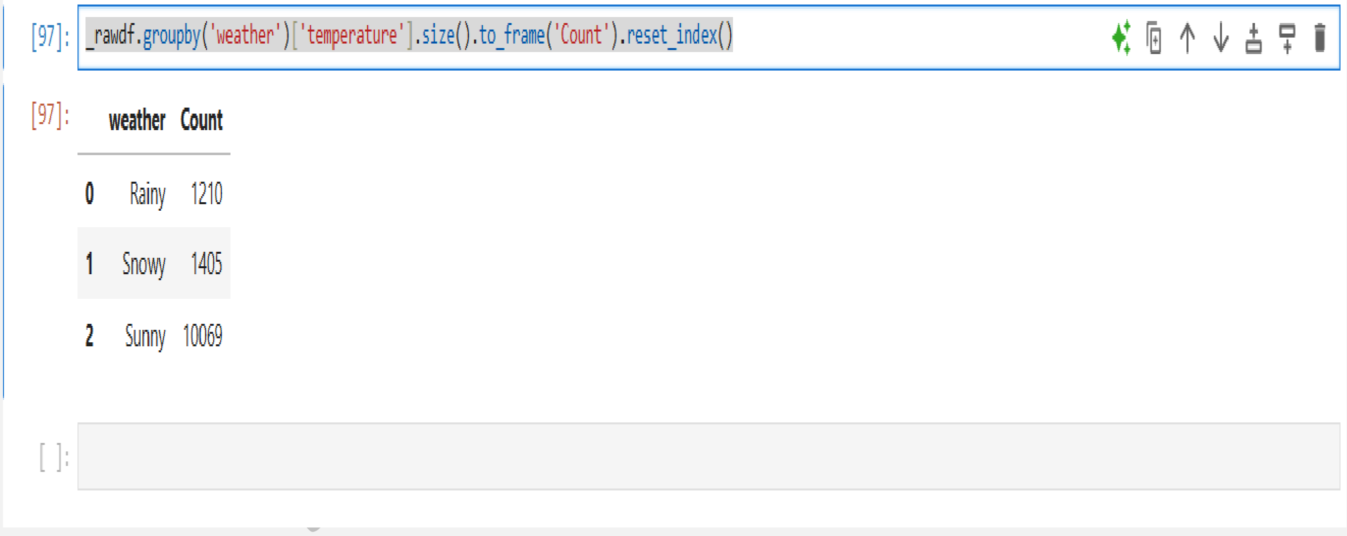
dataset_1 1
select weather,count(temperature) as Count fr
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Value
Panels

	weather	Count
1	Rainy	1,210
2	Snowy	1,405
3	Sunny	10,069

Rainy

Python:

_rawdf.groupby('weather')['temperature'].size().to_frame('Count').reset_index()



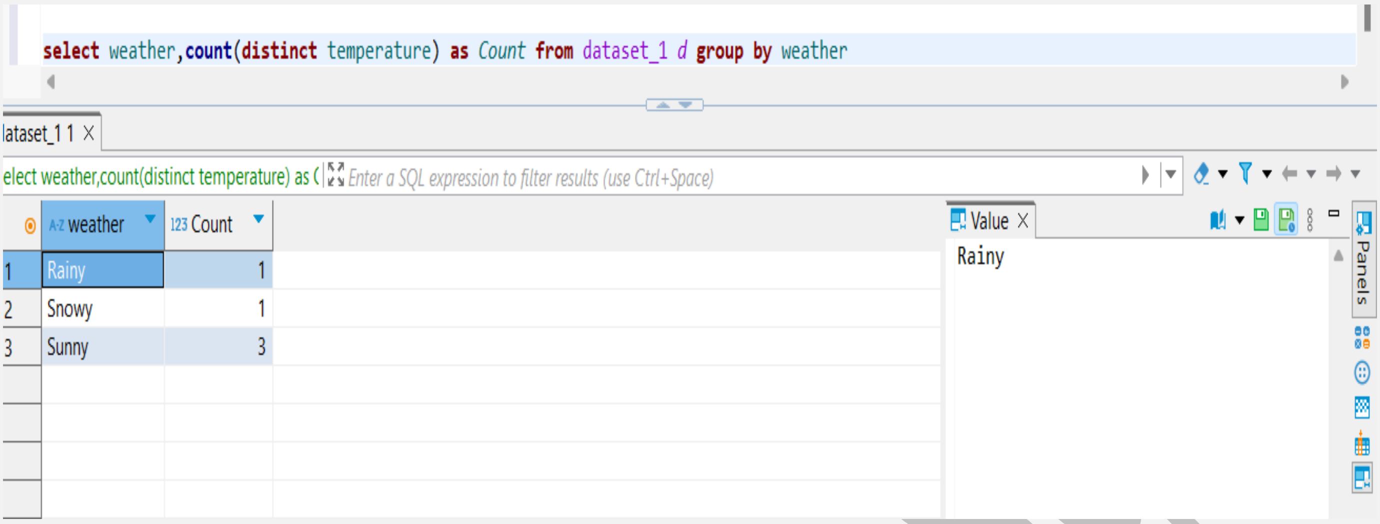
```
[97]: _rawdf.groupby('weather')['temperature'].size().to_frame('Count').reset_index()
```

[97]:

	weather	Count
0	Rainy	1210
1	Snowy	1405
2	Sunny	10069

Sql

select weather,count(distinct temperature) as *Count* from dataset_1 *d* group by weather



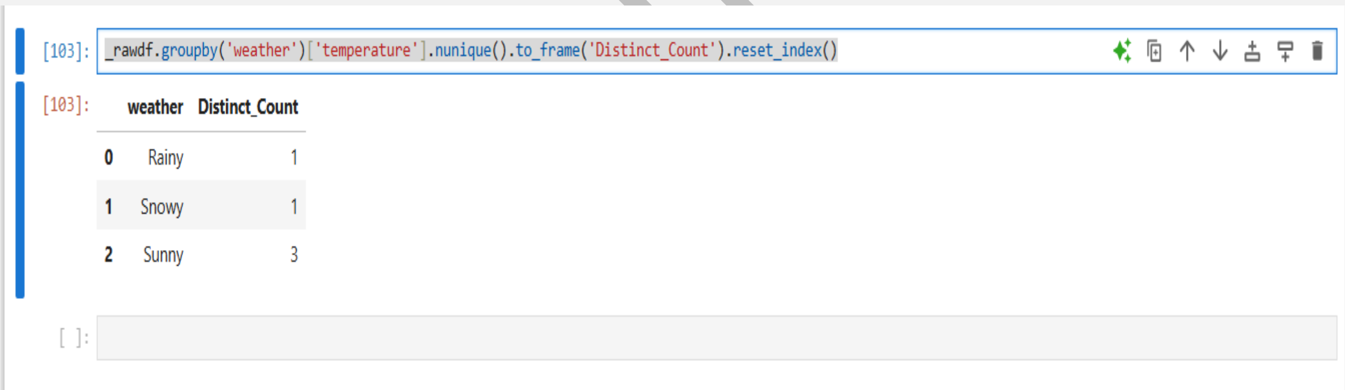
```
select weather,count(distinct temperature) as Count from dataset_1 d group by weather
```

lataset_1 1
elect weather,count(distinct temperature) as (
Enter a SQL expression to filter results (use Ctrl+Space)
Value
Rainy
Panels

	weather	Count
1	Rainy	1
2	Snowy	1
3	Sunny	3

Python

_rawdf.groupby('weather')['temperature'].nunique().to_frame('Distinct_Count').reset_index()



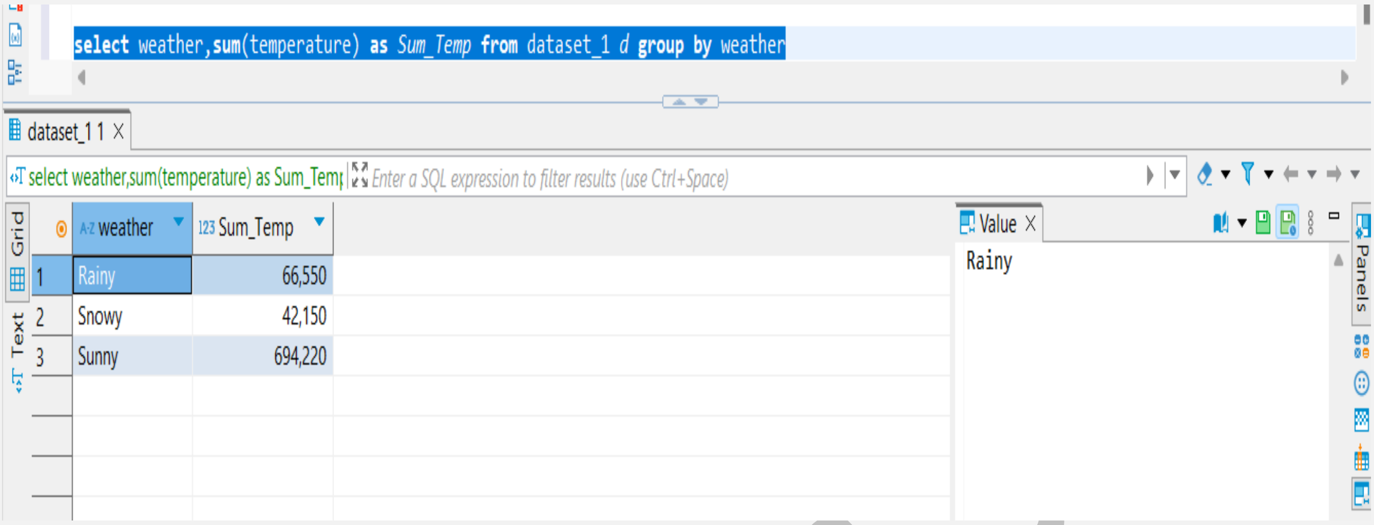
```
[103]: _rawdf.groupby('weather')['temperature'].nunique().to_frame('Distinct_Count').reset_index()
```

[103]:

	weather	Distinct_Count
0	Rainy	1
1	Snowy	1
2	Sunny	3

Sql

select weather,sum(temperature) as *Sum_Temp* from dataset_1 *d* group by weather



```
select weather,sum(temperature) as Sum_Temp from dataset_1 d group by weather
```

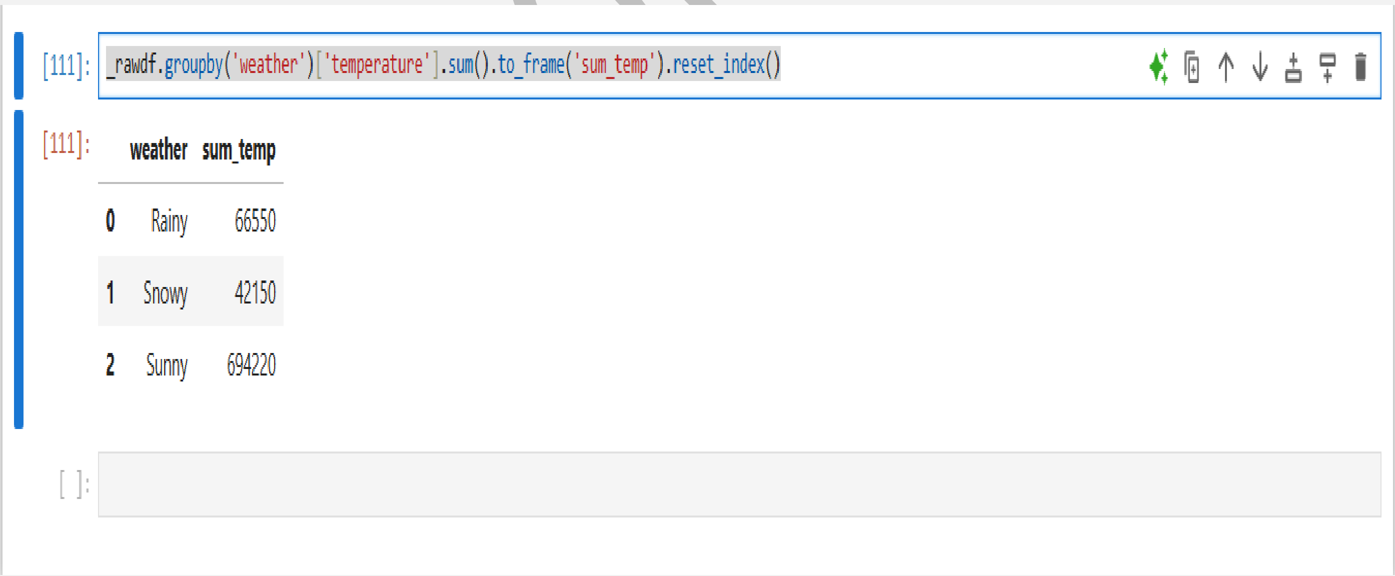
dataset_1 1
select weather,sum(temperature) as Sum_Temp
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Value
Panels

	weather	Sum_Temp
1	Rainy	66,550
2	Snowy	42,150
3	Sunny	694,220

Rainy

Python:

_rawdf.groupby('weather')['temperature'].sum().to_frame('sum_temp').reset_index()



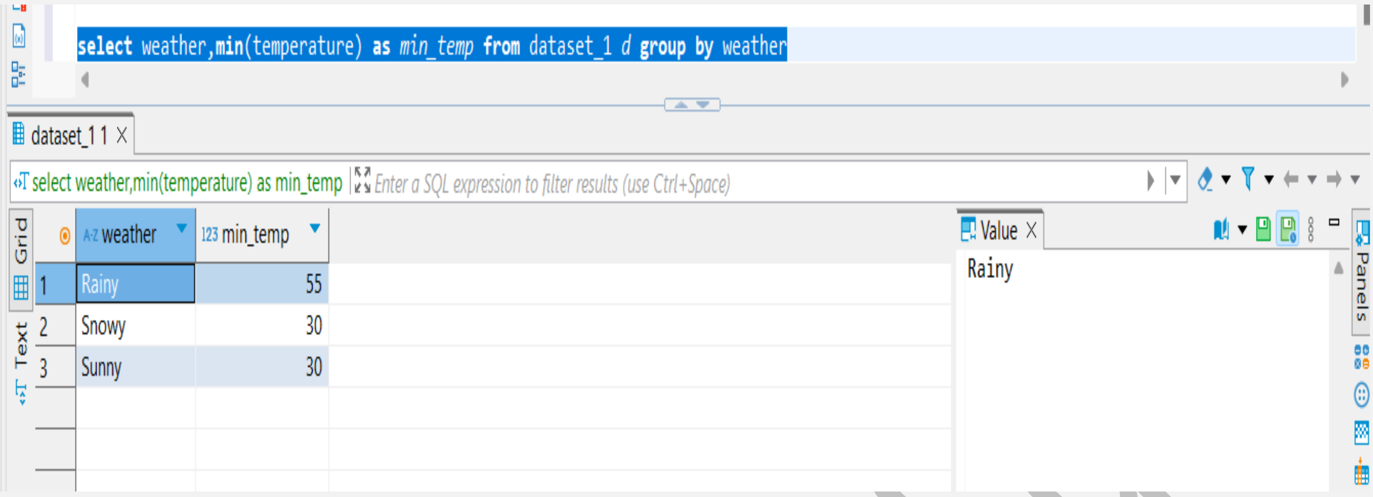
```
[111]: _rawdf.groupby('weather')['temperature'].sum().to_frame('sum_temp').reset_index()
```

[111]:

	weather	sum_temp
0	Rainy	66550
1	Snowy	42150
2	Sunny	694220

Sql:

select weather,min(temperature) as *min_temp* from dataset_1 *d* group by weather



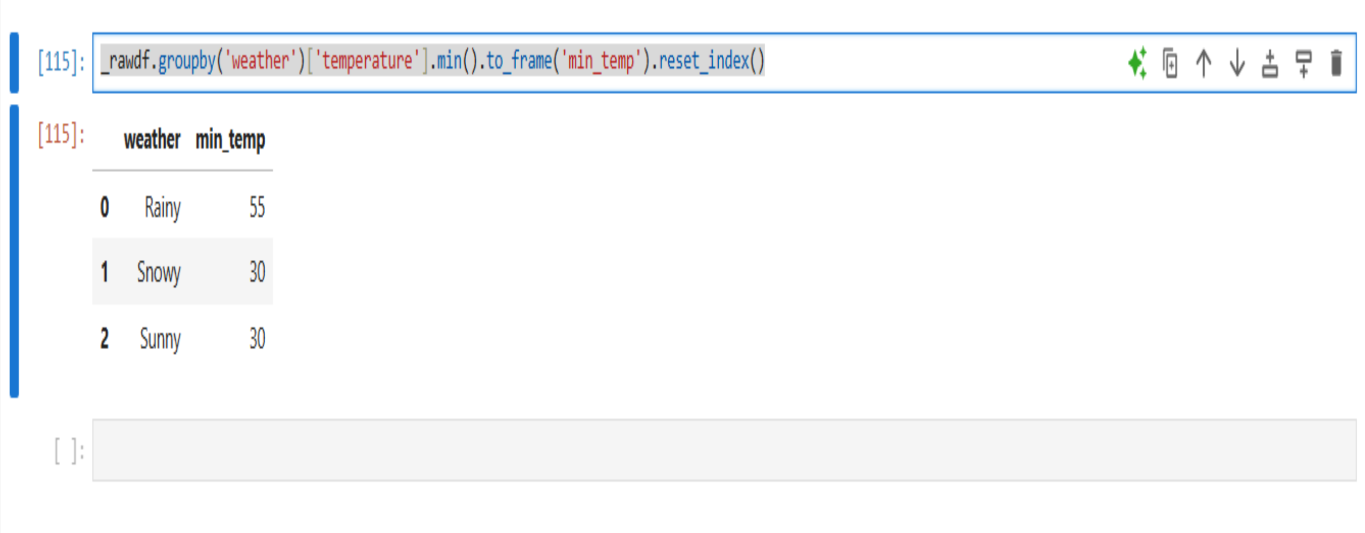
```
select weather,min(temperature) as min_temp from dataset_1 d group by weather
```

dataset_1 1
select weather,min(temperature) as min_temp
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Value
Rainy
Panels

	weather	min_temp
1	Rainy	55
2	Snowy	30
3	Sunny	30

Python:

_rawdf.groupby('weather')['temperature'].min().to_frame('min_temp').reset_index()



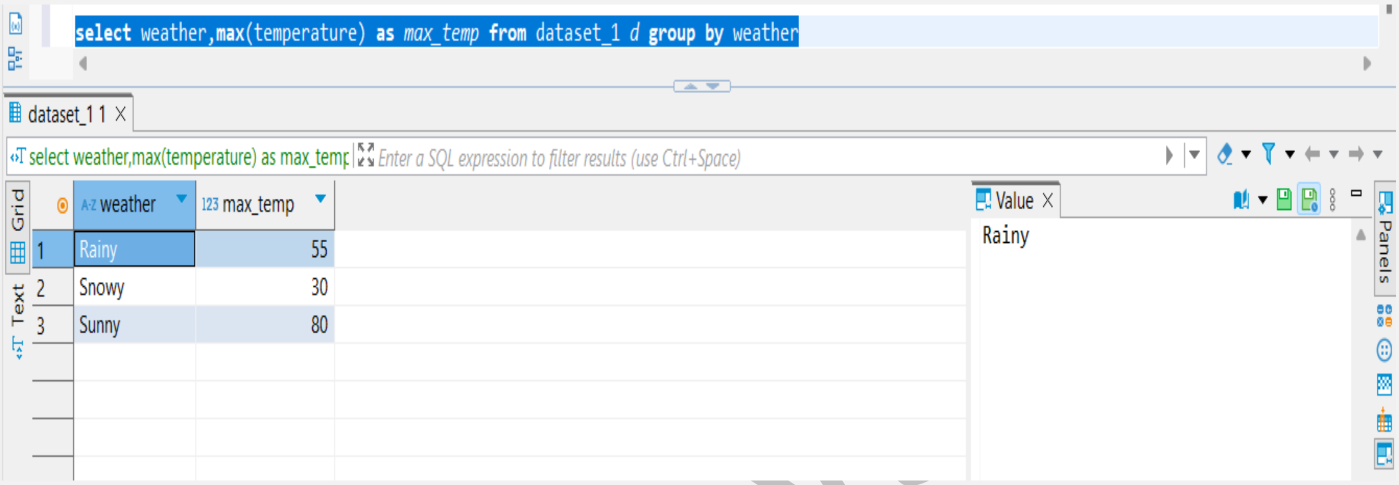
```
[115]: _rawdf.groupby('weather')['temperature'].min().to_frame('min_temp').reset_index()
```

[115]:

	weather	min_temp
0	Rainy	55
1	Snowy	30
2	Sunny	30

Sql

select weather,max(temperature) as *max_temp* from dataset_1 *d* group by weather



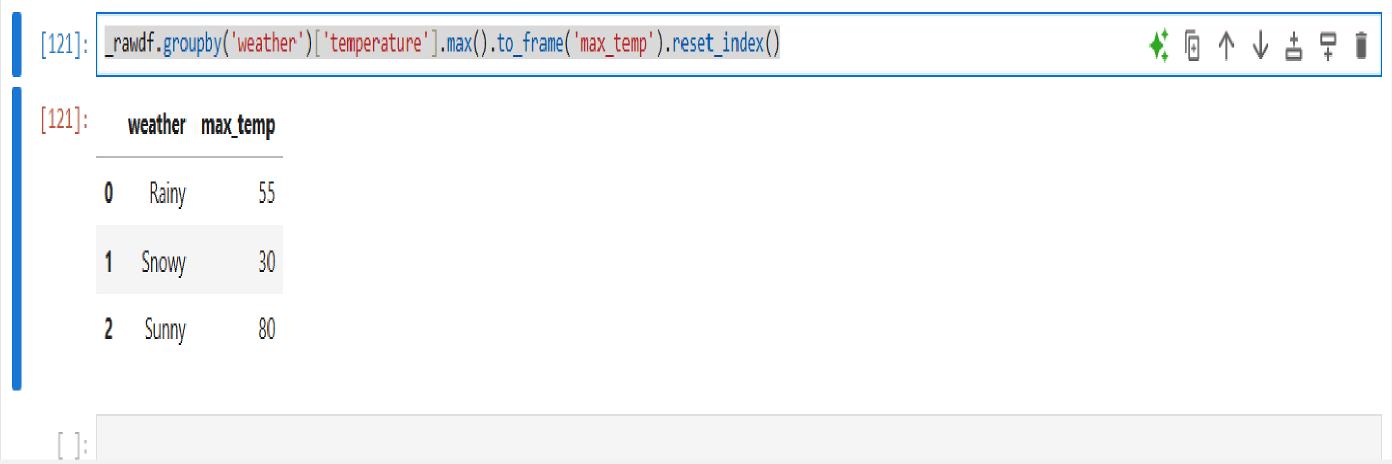
```
select weather,max(temperature) as max_temp from dataset_1 d group by weather
```

	weather	max_temp
1	Rainy	55
2	Snowy	30
3	Sunny	80

Rainy

Python:

_rawdf.groupby('weather')['temperature'].max().to_frame('max_temp').reset_index()



```
[121]: _rawdf.groupby('weather')['temperature'].max().to_frame('max_temp').reset_index()
```

[121]:

	weather	max_temp
0	Rainy	55
1	Snowy	30
2	Sunny	80

[ ]:

Sql:

SELECT DISTINCT destination **FROM**

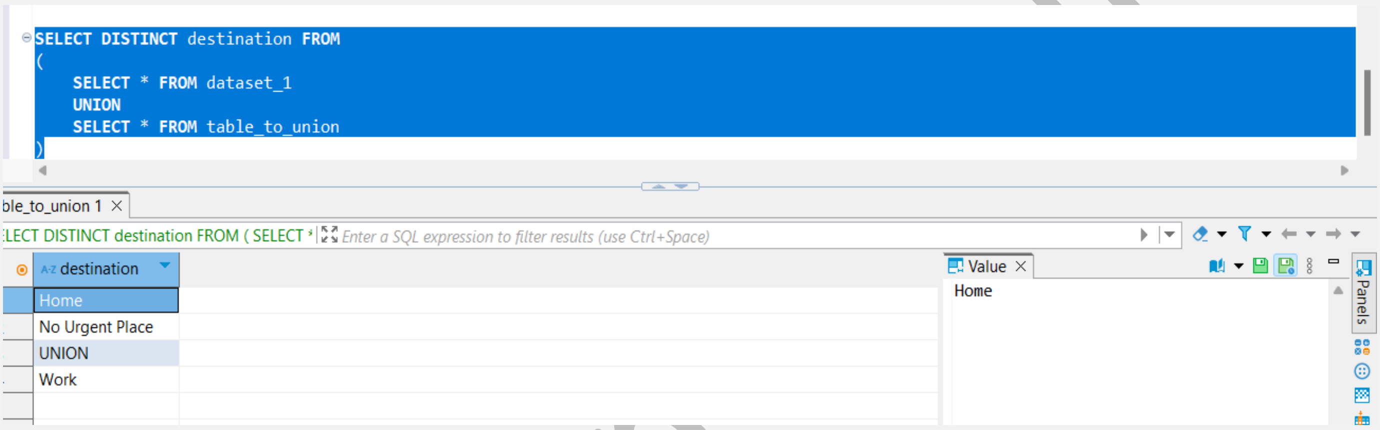
(

SELECT * **FROM** dataset_1

UNION

SELECT * **FROM** table_to_union

)



```
SELECT DISTINCT destination FROM
(
    SELECT * FROM dataset_1
    UNION
    SELECT * FROM table_to_union
)
```

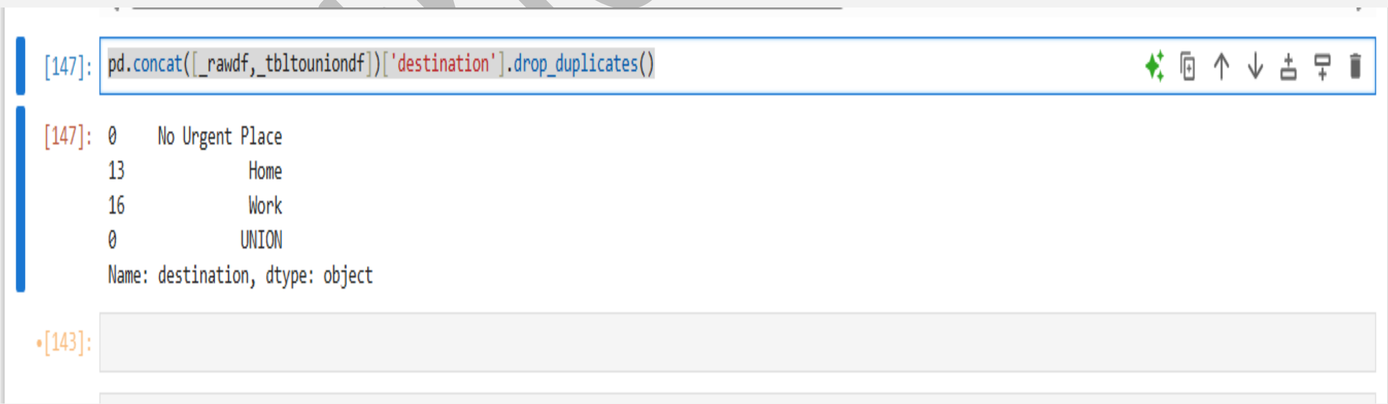
ble_to_union 1
:LECT DISTINCT destination FROM (SELECT *
Enter a SQL expression to filter results (use Ctrl+Space)
Value
Panels

destination
Home
No Urgent Place
UNION
Work

Value: Home

Python:

pd.concat([_rawdf,_tbltouniondf])['destination'].drop_duplicates()



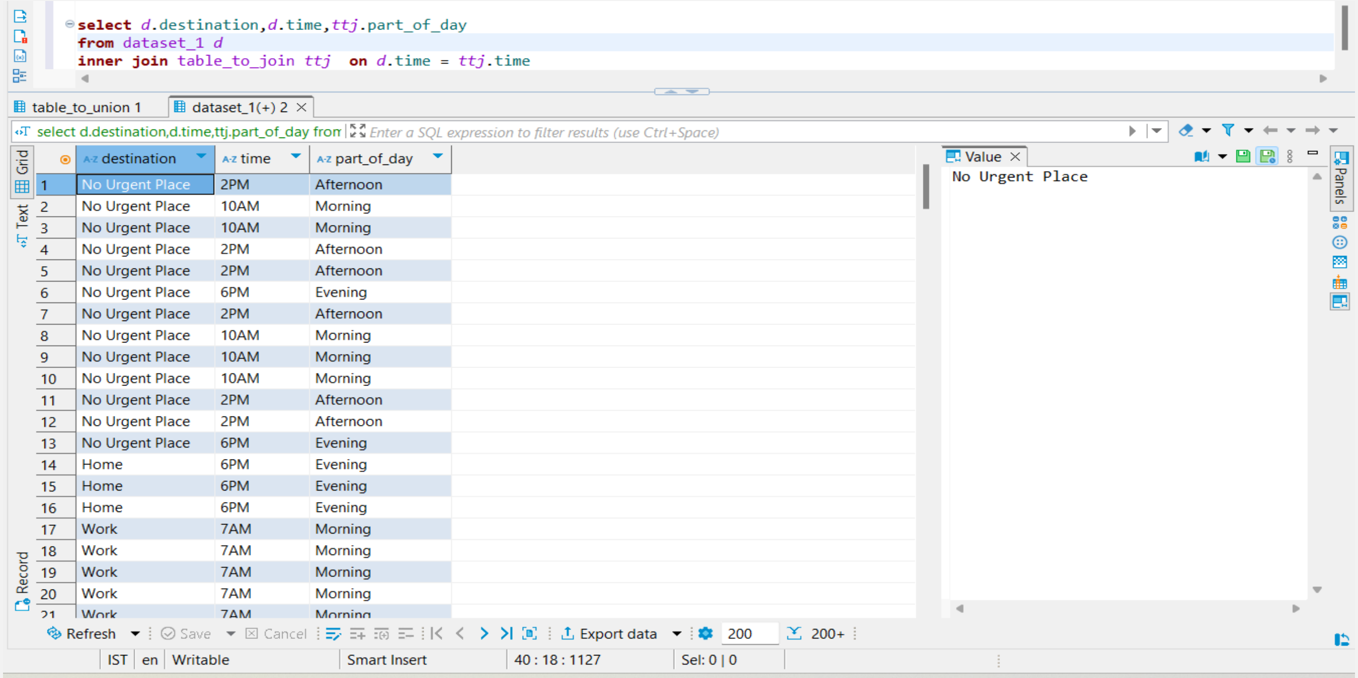
```
[147]: pd.concat([_rawdf,_tbltouniondf])['destination'].drop_duplicates()

[147]: 0     No Urgent Place
       13               Home
       16               Work
       0               UNION
       Name: destination, dtype: object

•[143]:
```

Joins Sql:

select *d*.destination,*d*.time,*ttj*.part_of_day

from dataset_1 *d*

inner join table_to_join *ttj* on *d*.time = *ttj*.time



```
select d.destination,d.time,ttj.part_of_day
from dataset_1 d
inner join table_to_join ttj  on d.time = ttj.time
```

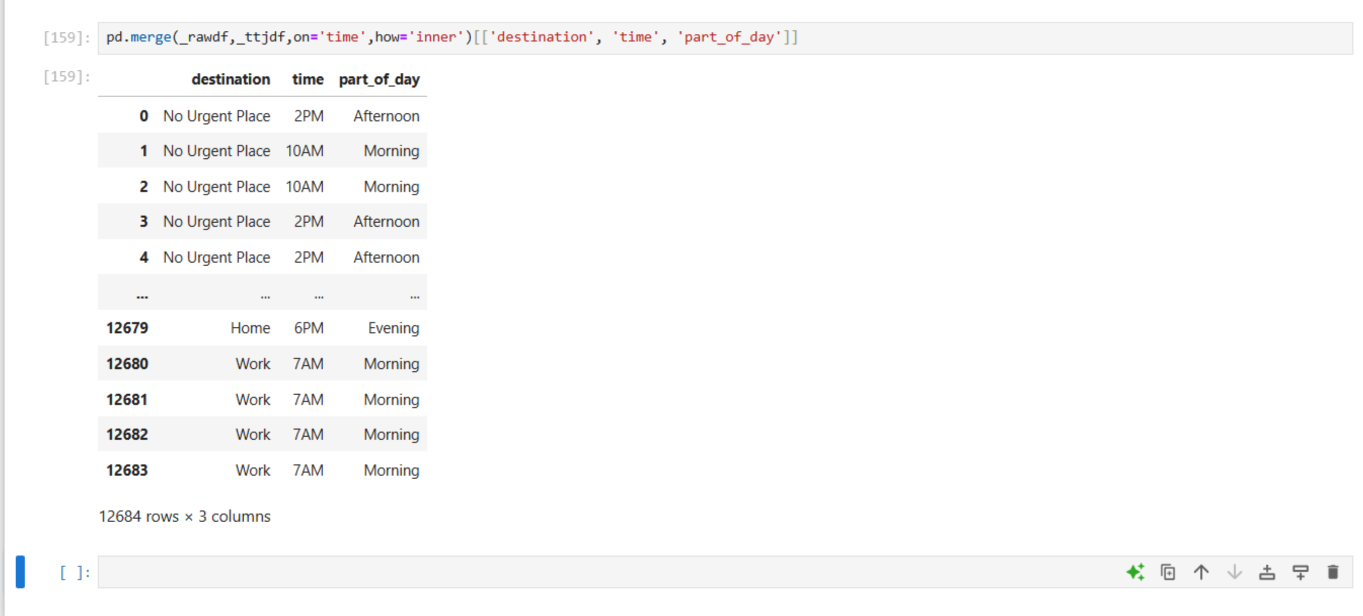
table_to_union 1
dataset_1(+) 2
select d.destination,d.time,ttj.part_of_day from
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Record
Value
Panels

	destination	time	part_of_day
1	No Urgent Place	2PM	Afternoon
2	No Urgent Place	10AM	Morning
3	No Urgent Place	10AM	Morning
4	No Urgent Place	2PM	Afternoon
5	No Urgent Place	2PM	Afternoon
6	No Urgent Place	6PM	Evening
7	No Urgent Place	2PM	Afternoon
8	No Urgent Place	10AM	Morning
9	No Urgent Place	10AM	Morning
10	No Urgent Place	10AM	Morning
11	No Urgent Place	2PM	Afternoon
12	No Urgent Place	2PM	Afternoon
13	No Urgent Place	6PM	Evening
14	Home	6PM	Evening
15	Home	6PM	Evening
16	Home	6PM	Evening
17	Work	7AM	Morning
18	Work	7AM	Morning
19	Work	7AM	Morning
20	Work	7AM	Morning
21	Work	7AM	Morning

Value: No Urgent Place

Python:

pd.merge(_rawdf,_ttjdf,on='time',how='inner')[['destination', 'time', 'part_of_day']]



```
[159]: pd.merge(_rawdf,_ttjdf,on='time',how='inner')[['destination', 'time', 'part_of_day']]
```

[159]:

	destination	time	part_of_day
0	No Urgent Place	2PM	Afternoon
1	No Urgent Place	10AM	Morning
2	No Urgent Place	10AM	Morning
3	No Urgent Place	2PM	Afternoon
4	No Urgent Place	2PM	Afternoon
...	...	...	...
12679	Home	6PM	Evening
12680	Work	7AM	Morning
12681	Work	7AM	Morning
12682	Work	7AM	Morning
12683	Work	7AM	Morning

12684 rows × 3 columns

```
[ ]:
```

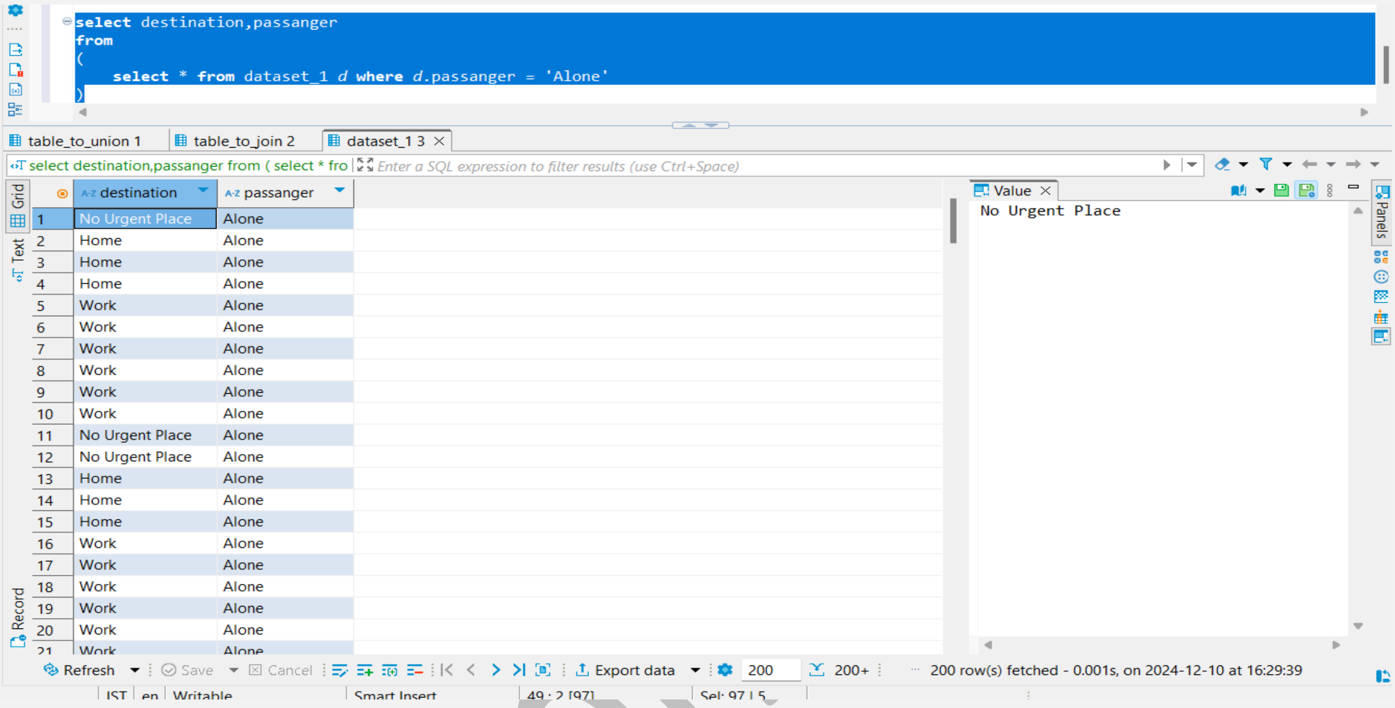
Sql:

select destination,passanger from

(

    select * from dataset_1 *d* where *d*.passanger = 'Alone'

)



```
select destination,passanger
from
(
    select * from dataset_1 d where d.passanger = 'Alone'
)
```

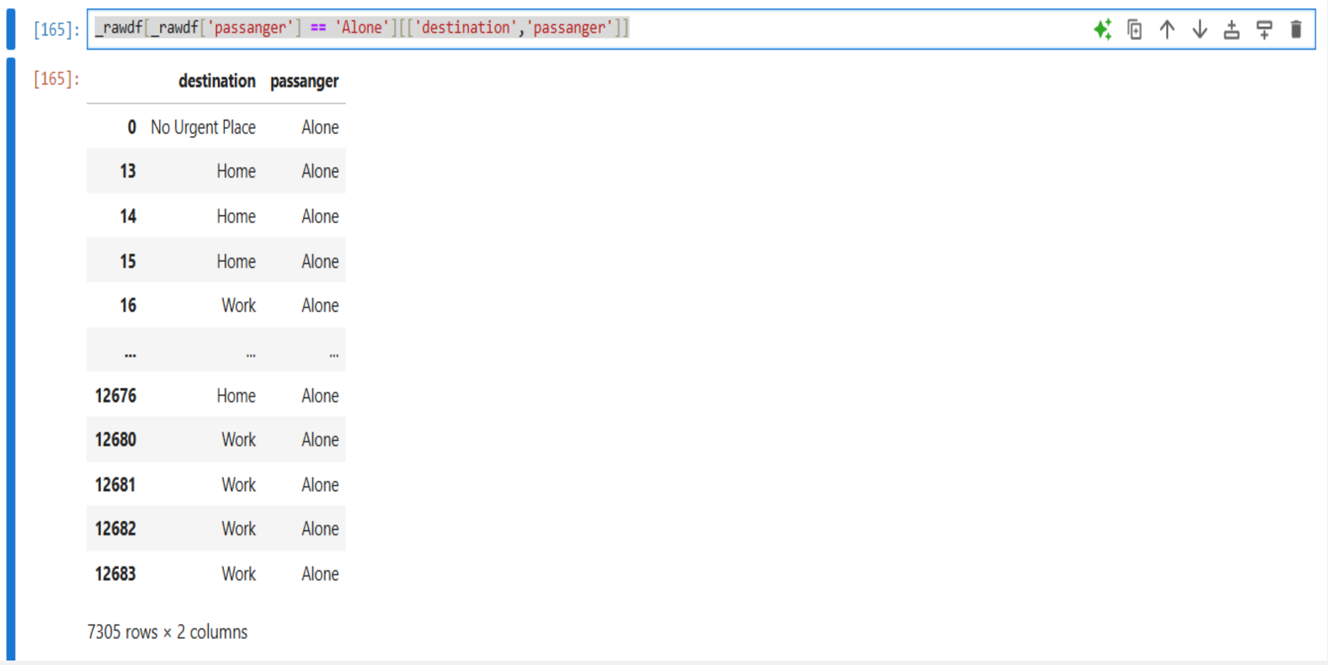
	destination	passanger
1	No Urgent Place	Alone
2	Home	Alone
3	Home	Alone
4	Home	Alone
5	Work	Alone
6	Work	Alone
7	Work	Alone
8	Work	Alone
9	Work	Alone
10	Work	Alone
11	No Urgent Place	Alone
12	No Urgent Place	Alone
13	Home	Alone
14	Home	Alone
15	Home	Alone
16	Work	Alone
17	Work	Alone
18	Work	Alone
19	Work	Alone
20	Work	Alone
21	Work	Alone

```
No Urgent Place
```

200 row(s) fetched - 0.001s, on 2024-12-10 at 16:29:39

Python:

_rawdf[_rawdf['passanger'] == 'Alone'][['destination','passanger']]



```
[165]: _rawdf[_rawdf['passanger'] == 'Alone'][['destination','passanger']]
```

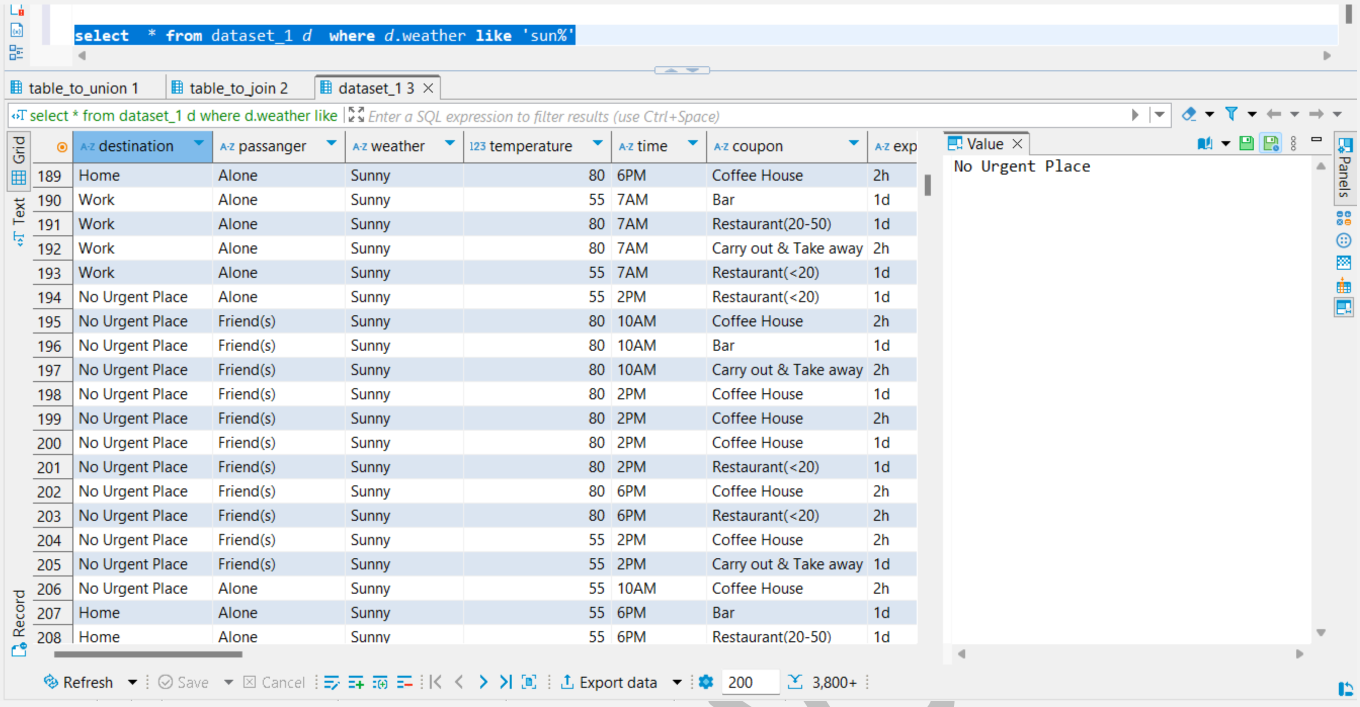
[165]:

	destination	passanger
0	No Urgent Place	Alone
13	Home	Alone
14	Home	Alone
15	Home	Alone
16	Work	Alone
...	...	...
12676	Home	Alone
12680	Work	Alone
12681	Work	Alone
12682	Work	Alone
12683	Work	Alone

7305 rows × 2 columns

SQl:

select * **from** dataset_1 *d* **where** *d*.weather **like** 'sun%'



```
select  * from dataset_1 d  where d.weather like 'sun%'
```

select * from dataset_1 d where d.weather like

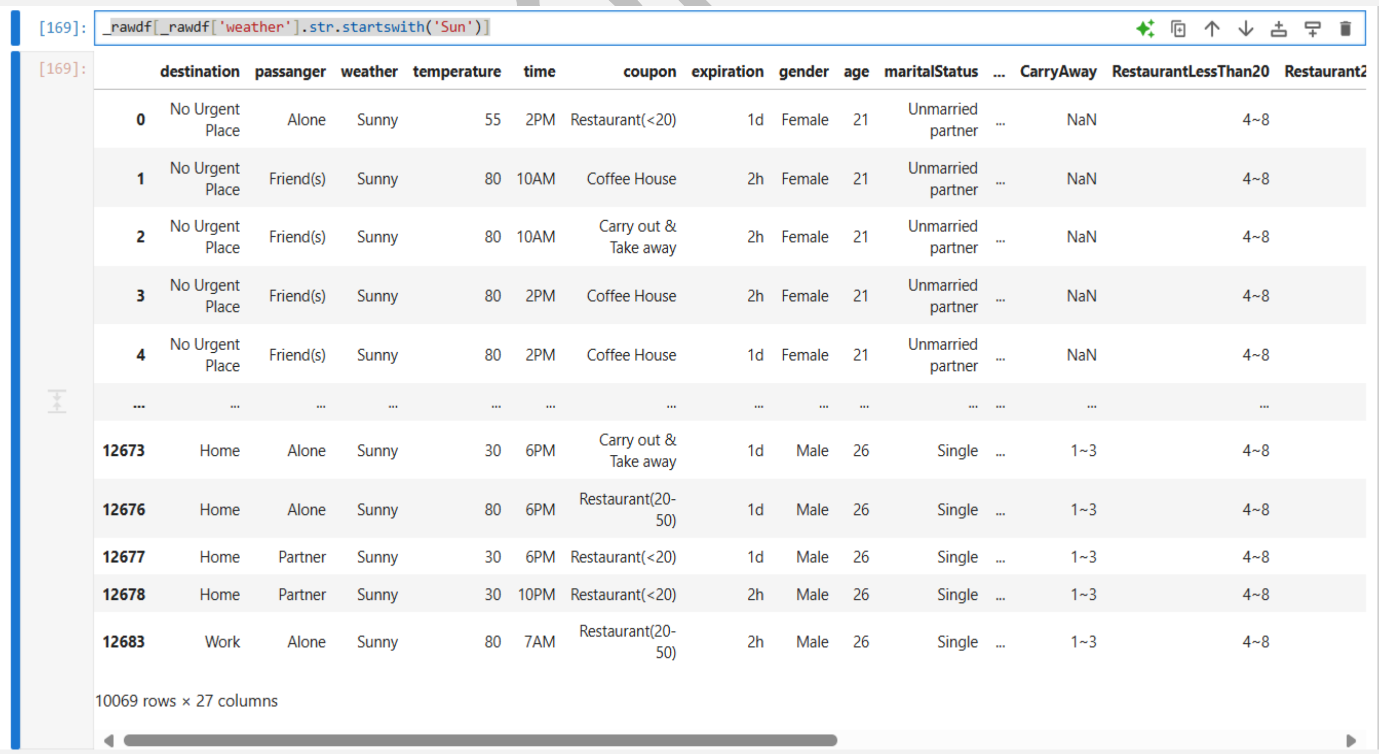
Enter a SQL expression to filter results (use Ctrl+Space)

	destination	passanger	weather	temperature	time	coupon	exp
189	Home	Alone	Sunny	80	6PM	Coffee House	2h
190	Work	Alone	Sunny	55	7AM	Bar	1d
191	Work	Alone	Sunny	80	7AM	Restaurant(20-50)	1d
192	Work	Alone	Sunny	80	7AM	Carry out & Take away	2h
193	Work	Alone	Sunny	55	7AM	Restaurant(<20)	1d
194	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d
195	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h
196	No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d
197	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h
198	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d
199	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h
200	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d
201	No Urgent Place	Friend(s)	Sunny	80	2PM	Restaurant(<20)	1d
202	No Urgent Place	Friend(s)	Sunny	80	6PM	Coffee House	2h
203	No Urgent Place	Friend(s)	Sunny	80	6PM	Restaurant(<20)	2h
204	No Urgent Place	Friend(s)	Sunny	55	2PM	Coffee House	2h
205	No Urgent Place	Friend(s)	Sunny	55	2PM	Carry out & Take away	1d
206	No Urgent Place	Alone	Sunny	55	10AM	Coffee House	2h
207	Home	Alone	Sunny	55	6PM	Bar	1d
208	Home	Alone	Sunny	55	6PM	Restaurant(20-50)	1d

```
No Urgent Place
```

Python:

rawdf[_rawdf['weather'].str.startswith('Sun')]



```
[169]: _rawdf[_rawdf['weather'].str.startswith('Sun')]
```

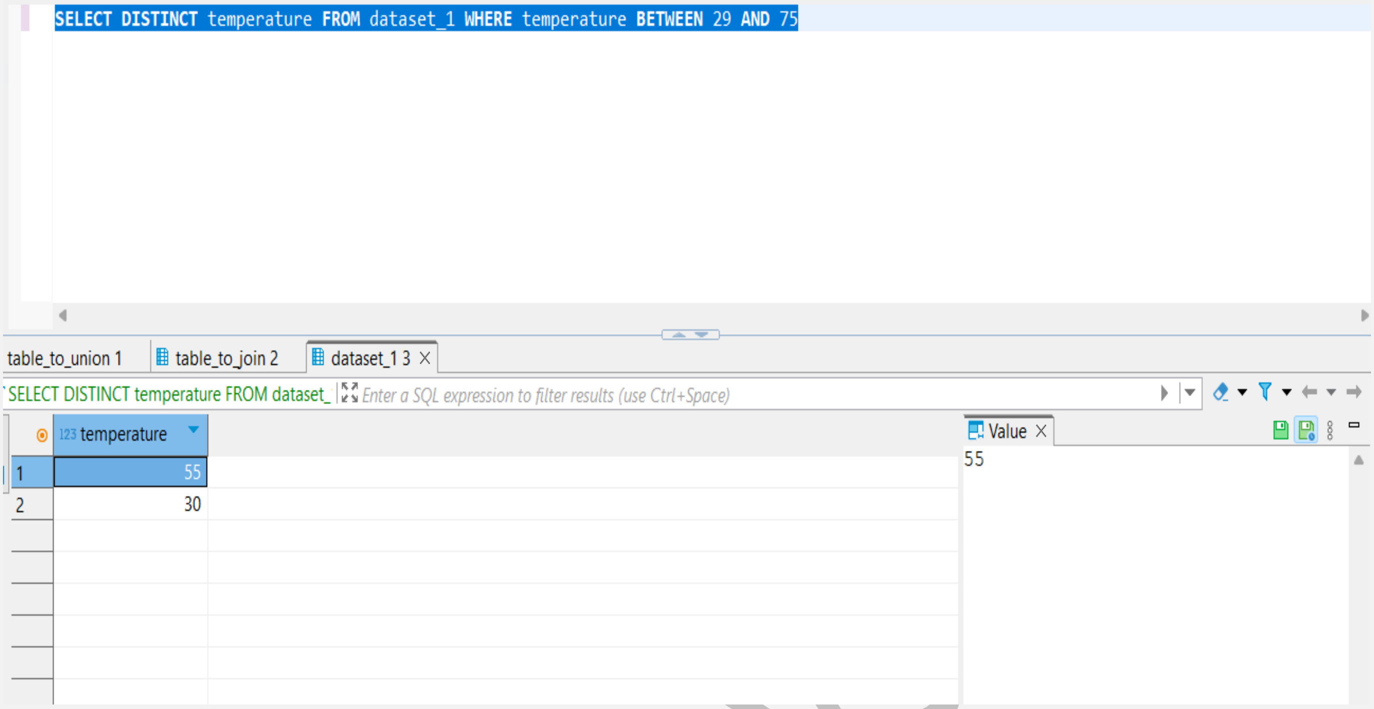
[169]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant2
0	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Female	21	Unmarried partner	...	NaN	4~8	
1	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h	Female	21	Unmarried partner	...	NaN	4~8	
3	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h	Female	21	Unmarried partner	...	NaN	4~8	
4	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d	Female	21	Unmarried partner	...	NaN	4~8	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12673	Home	Alone	Sunny	30	6PM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12676	Home	Alone	Sunny	80	6PM	Restaurant(20-50)	1d	Male	26	Single	...	1~3	4~8	
12677	Home	Partner	Sunny	30	6PM	Restaurant(<20)	1d	Male	26	Single	...	1~3	4~8	
12678	Home	Partner	Sunny	30	10PM	Restaurant(<20)	2h	Male	26	Single	...	1~3	4~8	
12683	Work	Alone	Sunny	80	7AM	Restaurant(20-50)	2h	Male	26	Single	...	1~3	4~8	

10069 rows × 27 columns

SQL:

SELECT DISTINCT temperature FROM dataset_1 WHERE temperature BETWEEN 29 AND 75



```
SELECT DISTINCT temperature FROM dataset_1 WHERE temperature BETWEEN 29 AND 75
```

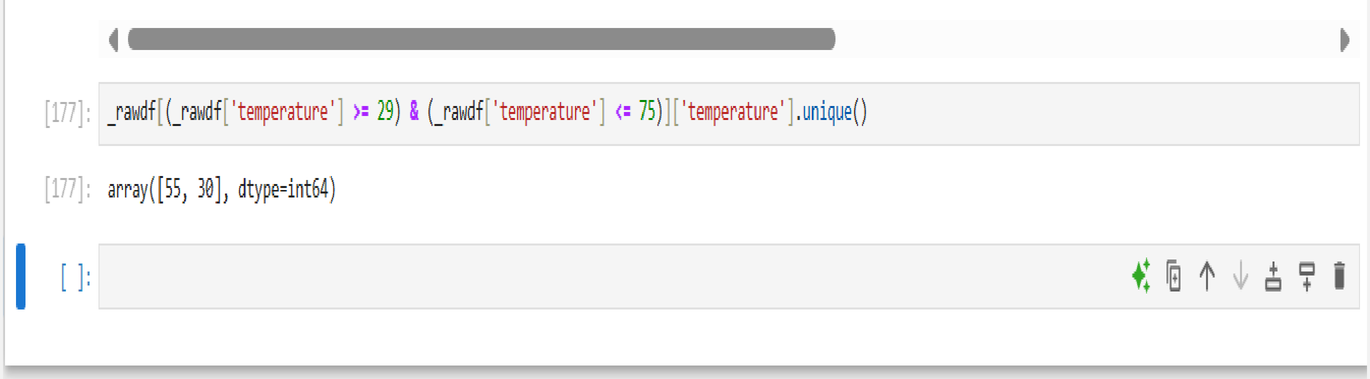
table_to_union 1
table_to_join 2
dataset_1 3
SELECT DISTINCT temperature FROM dataset_
Enter a SQL expression to filter results (use Ctrl+Space)
Value

	temperature
1	55
2	30

Value: 55

Python:

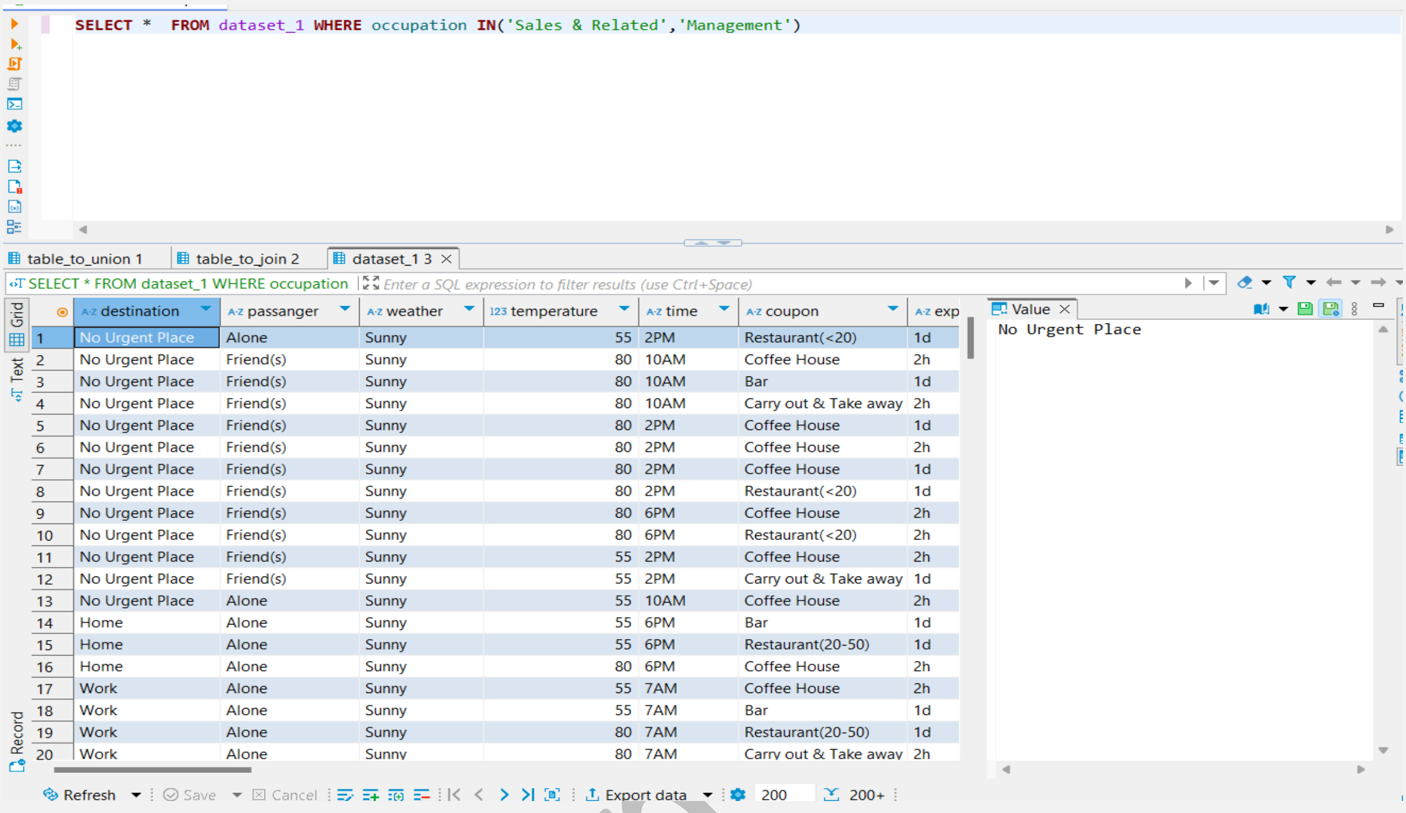
_rawdf[(_rawdf['temperature'] >= 29) & (_rawdf['temperature'] <= 75)]['temperature'].unique()



```
[177]: _rawdf[(_rawdf['temperature'] >= 29) & (_rawdf['temperature'] <= 75)]['temperature'].unique()

[177]: array([55, 30], dtype=int64)

[ ]:
```

SQL:

SELECT * FROM dataset_1 WHERE occupation IN('Sales & Related','Management')



```
SELECT *  FROM dataset_1 WHERE occupation IN('Sales & Related','Management')
```

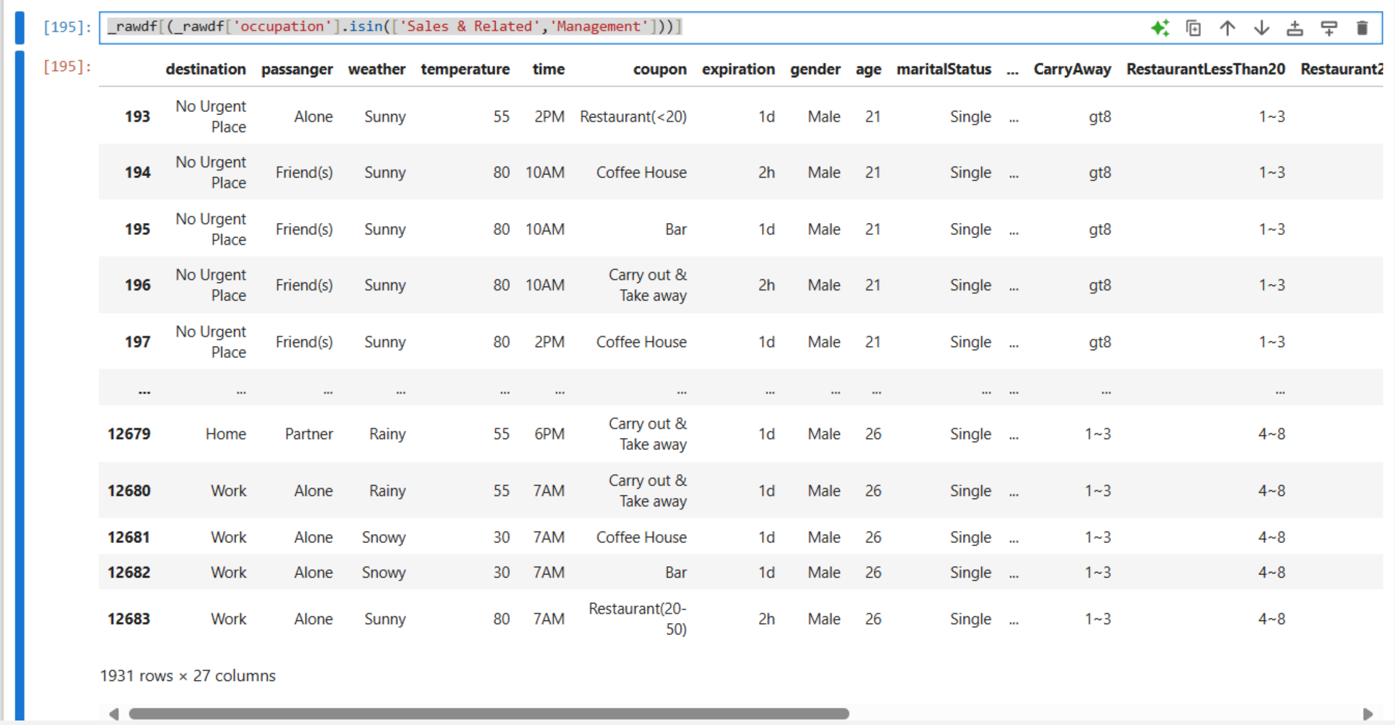
table_to_union 1
table_to_join 2
dataset_1 3
SELECT * FROM dataset_1 WHERE occupation
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Record
Value
Refresh
Save
Cancel
Export data
200
200+

	destination	passanger	weather	temperature	time	coupon	exp
1	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d
2	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h
3	No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d
4	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h
5	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d
6	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	2h
7	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d
8	No Urgent Place	Friend(s)	Sunny	80	2PM	Restaurant(<20)	1d
9	No Urgent Place	Friend(s)	Sunny	80	6PM	Coffee House	2h
10	No Urgent Place	Friend(s)	Sunny	80	6PM	Restaurant(<20)	2h
11	No Urgent Place	Friend(s)	Sunny	55	2PM	Coffee House	2h
12	No Urgent Place	Friend(s)	Sunny	55	2PM	Carry out & Take away	1d
13	No Urgent Place	Alone	Sunny	55	10AM	Coffee House	2h
14	Home	Alone	Sunny	55	6PM	Bar	1d
15	Home	Alone	Sunny	55	6PM	Restaurant(20-50)	1d
16	Home	Alone	Sunny	80	6PM	Coffee House	2h
17	Work	Alone	Sunny	55	7AM	Coffee House	2h
18	Work	Alone	Sunny	55	7AM	Bar	1d
19	Work	Alone	Sunny	80	7AM	Restaurant(20-50)	1d
20	Work	Alone	Sunny	80	7AM	Carry out & Take away	2h

```
No Urgent Place
```

Python:

_rawdf[(_rawdf['occupation'].isin(['Sales & Related','Management']))]



```
[195]: _rawdf[(_rawdf['occupation'].isin(['Sales & Related','Management']))]
```

[195]:

	destination	passanger	weather	temperature	time	coupon	expiration	gender	age	maritalStatus	...	CarryAway	RestaurantLessThan20	Restaurant2
193	No Urgent Place	Alone	Sunny	55	2PM	Restaurant(<20)	1d	Male	21	Single	...	gt8	1~3	
194	No Urgent Place	Friend(s)	Sunny	80	10AM	Coffee House	2h	Male	21	Single	...	gt8	1~3	
195	No Urgent Place	Friend(s)	Sunny	80	10AM	Bar	1d	Male	21	Single	...	gt8	1~3	
196	No Urgent Place	Friend(s)	Sunny	80	10AM	Carry out & Take away	2h	Male	21	Single	...	gt8	1~3	
197	No Urgent Place	Friend(s)	Sunny	80	2PM	Coffee House	1d	Male	21	Single	...	gt8	1~3	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12679	Home	Partner	Rainy	55	6PM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12680	Work	Alone	Rainy	55	7AM	Carry out & Take away	1d	Male	26	Single	...	1~3	4~8	
12681	Work	Alone	Snowy	30	7AM	Coffee House	1d	Male	26	Single	...	1~3	4~8	
12682	Work	Alone	Snowy	30	7AM	Bar	1d	Male	26	Single	...	1~3	4~8	
12683	Work	Alone	Sunny	80	7AM	Restaurant(20-50)	2h	Male	26	Single	...	1~3	4~8	

1931 rows × 27 columns