

MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks

Limit to 1000 rows

1 • `SELECT AVG(marks) FROM campusx.marks`

Result Grid

AVG(marks)
75.2500

Result 2 x

Output

Action Output

#	Time	Action	Message
✓ 164	19:50:46	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 165	19:51:19	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 166	19:51:22	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 167	19:51:28	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 168	20:10:06	SELECT * FROM campusx.marks LIMIT 0, 1000	16 row(s) returned
✓ 169	20:10:27	SELECT AVG(marks) FROM campusx.marks LIMIT 0, 1000	1 row(s) returned

Object Info Session

No object selected

Administration Schemas

Information

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator

SQL File 10*

marks

SCHEMAS

Filter objects

campusx

- Tables
 - airports
 - flights
 - ipl
 - marks
 - null_sample
 - smartphones
 - users
- Views
- Stored Procedures
- Functions

flights

flipkart

indigo

ipl

maang

mydb

phpmyadmin

sample

sql_ox_live

sql_tasks

swiggy

temp_db

test

tinder

zomato

Tables

Administration Schemas

Information

No object selected

Object Info Session

1 • SELECT AVG(marks) OVER() FROM campusx.marks

Result Grid

Filter Rows

Export

Wrap Cell Content

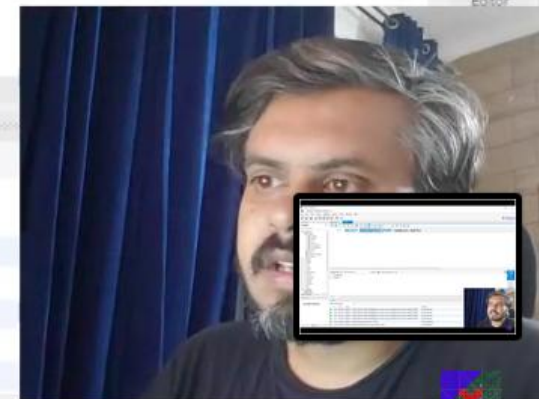
	AVG(marks) OVER()
▶	75.2500
	75.2500
	75.2500
	75.2500
	75.2500
	75.2500
	75.2500

Result 3

Output

Action Output

#	Time	Action	Message
✓ 165	19:51:19	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 166	19:51:22	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 167	19:51:28	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 168	20:10:06	SELECT * FROM campusx.marks LIMIT 0, 1000	16 row(s) returned
✓ 169	20:10:27	SELECT AVG(marks) FROM campusx.marks LIMIT 0, 1000	1 row(s) returned
✓ 170	20:10:49	SELECT AVG(marks) OVER() FROM campusx.marks	16 row(s) returned



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SQL File 10*

marks

Limit to 1000 rows

Navigator

SCHEMAS

Filter objects

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sql_tasks

swiggy

temp_db

test

tinder

zomato

AdministrationSchemas

Information

No object selected

Object InfoSession

1 • SELECT *,AVG(marks) OVER() FROM campusx.marks

Result Grid

Filter Rows

Exports

Wrap Cell Content

	student_id	name	branch	marks	AVG(marks) OVER()
▶	15	Sunny	MECH	39	75.2500
	6	Ved	CSE	43	75.2500
	16	Gautam	MECH	51	75.2500
	4	Rupesh	EEE	55	75.2500
	3	Anukant	EEE	69	75.2500
	14	Amit	MECH	69	75.2500
	13	Prashant	MECH	75	75.2500

Result 4 ×

Output

Action Output

#	Time	Action	Message
✓ 166	19:51:22	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 167	19:51:28	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 168	20:10:06	SELECT * FROM campusx.marks LIMIT 0, 1000	16 row(s) returned
✓ 169	20:10:27	SELECT AVG(marks) FROM campusx.marks LIMIT 0, 1000	1 row(s) returned
✓ 170	20:10:49	SELECT AVG(marks) OVER() FROM campusx.marks	16 row(s) returned
✓ 171	20:11:05	SELECT *,AVG(marks) OVER() FROM campusx.marks	16 row(s) returned

Result Grid

Form Editor



MySQL Workbench

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File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks

Limit to 1000 rows

1 • `SELECT *,AVG(marks) OVER(PARTITION BY branch) FROM campusx.marks`

Result Grid

	student_id	name	branch	marks	AVG(marks) OVER(PARTITION BY branch)
▶	5	Shubham	CSE	78	78.5000
	6	Ved	CSE	43	78.5000
	7	Deepak	CSE	98	78.5000
	8	Arpan	CSE	95	78.5000
	9	Vinay	ECE	95	89.7500
	10	Ankit	ECE	88	89.7500
	11	Anand	ECE	81	89.7500

Result 5 ×

Output

Action Output

#	Time	Action	Message
✓ 167	19:51:28	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
✓ 168	20:10:06	SELECT * FROM campusx.marks LIMIT 0, 1000	16 row(s) returned
✓ 169	20:10:27	SELECT AVG(marks) FROM campusx.marks LIMIT 0, 1000	1 row(s) returned
✓ 170	20:10:49	SELECT AVG(marks) OVER() FROM campusx.marks	16 row(s) returned
✓ 171	20:11:05	SELECT *,AVG(marks) OVER() FROM campusx.marks	16 row(s) returned
✓ 172	20:12:41	SELECT *,AVG(marks) OVER(PARTITION BY branch) FROM campusx.marks	16 row(s) returned

Object Info Session

No object selected

Administration Schemas

Information

Result Grid

Form Editor



MySQL Workbench

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File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks

Limit to 1000 rows

1 • SELECT *,
2 MIN(marks) OVER(),
3 MAX(marks) OVER()
4 FROM campusx.marks

Result Grid

	student_id	name	branch	marks	MIN(marks) OVER()	MAX(marks) OVER()
▶	15	Sunny	MECH	39	39	98
	6	Ved	CSE	43	39	98
	16	Gautam	MECH	51	39	98
	4	Rupesh	EEE	55	39	98
	3	Anukant	EEE	69	39	98
	14	Amit	MECH	69	39	98
	13	Prashant	MECH	75	39	98

Result 6 x

Output

Action Output

#	Time	Action	Message
✓ 169	20:10:27	SELECT AVG(marks) FROM campusx.marks LIMIT 0, 1000	1 row(s) returned
✓ 170	20:10:49	SELECT AVG(marks) OVER() FROM campusx.marks	16 row(s) returned
✓ 171	20:11:05	SELECT *.AVG(marks) OVER() FROM campusx.marks	16 row(s) returned
✓ 172	20:12:41	SELECT *.AVG(marks) OVER(PARTITION BY branch) FROM campusx.marks	16 row(s) returned
✗ 173	20:15:08	SELECT *, MIN(marks) OVER(), MAX(marks) OVER() FROM marks	Error Code: 1146. Table 'zomato.marks' doesn't exist
✓ 174	20:15:33	SELECT *, MIN(marks) OVER(), MAX(marks) OVER() FROM campusx.marks	16 row(s) returned

Object Info Session

Result Grid Form Editor



MySQL Workbench

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Navigator SQL File 10* marks

Limit to 1000 rows

SCHEMAS

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phpmyadmin

sample

sql_ox_live

sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

Information

No object selected

```
1 • SELECT *,
2   AVG(marks) OVER(),
3   MIN(marks) OVER(),
4   MAX(marks) OVER(),
5   MIN(marks) OVER(PARTITION BY branch),
6   MAX(marks) OVER(PARTITION BY branch)
7 FROM campusx.marks
```

Result Grid

	student_id	name	branch	marks	AVG(marks) OVER()	MIN(marks) OVER()	MAX(marks) OVER()	MIN(marks) OVER(PARTITION BY branch)	MAX(marks) OVER(PARTITION BY branch)
▶	1	Nitish	EEE	82	75.2500	39	98	55	91
	2	Rishabh	EEE	91	75.2500	39	98	55	91
	3	Anukant	EEE	69	75.2500	39	98	55	91
	4	Rupesh	EEE	55	75.2500	39	98	55	91
	5	Shubham	CSE	78	75.2500	39	98	43	98
	6	Ved	CSE	43	75.2500	39	98	43	98
	7	Deepak	CSE	98	75.2500	39	98	43	98


Result 13 x

Output

Action Output

#	Time	Action	Message
✓ 176	20:16:08	SELECT *, AVG(marks) OVER() FROM campus.marks	16 row(s) returned
✓ 177	20:16:27	SELECT * FROM campus.marks LIMIT 0, 1000	16 row(s) returned
✓ 178	20:16:34	SELECT *, AVG(marks) OVER() FROM campus.marks	16 row(s) returned
✓ 179	20:17:04	SELECT *, AVG(marks) OVER() FROM campus.marks ORDER BY student_id	16 row(s) returned
✓ 180	20:17:26	SELECT *, AVG(marks) OVER(), MIN(marks) OVER(), MAX(marks) OVER() FROM campus.marks ORDER BY ...	16 row(s) returned
✓ 181	20:18:07	SELECT *, AVG(marks) OVER(), MIN(marks) OVER(), MAX(marks) OVER(), MIN(marks) OVER(PARTITION BY ...	16 row(s) returned

Object Info Session



Aggregate Function with OVER()

27 February 2023 16:41

Find all the students who have marks higher than the avg marks of their respective branch



MySQL Workbench

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File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks

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Filter objects

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sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

Information

No object selected

```
9
10 • USE campusx;
11
12 • SELECT * FROM (SELECT *,
13     AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg'
14     FROM marks) t
15     WHERE t.marks > t.branch_avg
```

Result Grid

student_id	name	branch	marks	branch_avg
8	Arpan	CSE	95	78.5000
9	Vinay	ECE	95	89.7500
12	Rohit	ECE	95	89.7500
1	Nitish	EEE	82	74.2500
2	Rishabh	EEE	91	74.2500
13	Prashant	MECH	75	58.5000
14	Amit	MECH	69	58.5000


Result 17 x

Output

Action Output

#	Time	Action	Message
181	20:18:07	SELECT *, AVG(marks) OVER(), MIN(marks) OVER(), MAX(marks) OVER(), MIN(marks) OVER(PARTITION BY ...	16 row(s) returned
182	20:18:47	SELECT *, AVG(marks) OVER() AS 'Overall_avg', MIN(marks) OVER(), MAX(marks) OVER(), MIN(marks) OVE...	16 row(s) returned
183	20:21:24	USE campusx	0 row(s) affected
184	20:22:07	SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks	16 row(s) returned
185	20:22:57	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t	16 row(s) returned
186	20:23:17	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t W...	8 row(s) returned

Object Info Session



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks

Limit to 1000 rows

```
12 • SELECT * FROM (SELECT *,
13     AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg'
14     FROM marks) t
15     WHERE t.marks < t.branch_avg;
16
17 • SELECT *,
18     RANK() OVER(PARTITION BY branch ORDER BY marks DESC)
```

Result Grid

	student_id	name	branch	marks	RANK() OVER(PARTITION BY branch ORDER BY marks DESC)
▶	7	Deepak	CSE	98	1
	8	Arpan	CSE	95	2
	5	Shubham	CSE	78	3
	6	Ved	CSE	43	4
	9	Vinay	ECE	95	1
	12	Rohit	ECE	95	1
	10	Ankit	ECE	88	3

Result 20 x

Output

Action Output

#	Time	Action	Message
✓ 184	20:22:07	SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks	16 row(s) returned
✓ 185	20:22:57	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t	16 row(s) returned
✓ 186	20:23:17	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t W...	8 row(s) returned
✓ 187	20:23:40	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t W...	8 row(s) returned
✓ 188	20:26:59	SELECT *, RANK() OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
✓ 189	20:27:44	SELECT *, RANK() OVER(PARTITION BY branch ORDER BY marks DESC) FROM marks	16 row(s) returned

Object Info Session

No object selected

Administration Schemas

Information

Result Grid Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks

Limit to 1000 rows

```
13 AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg'
14 FROM marks) t
15 WHERE t.marks < t.branch_avg;
16
17 • SELECT *,
18 RANK() OVER(PARTITION BY branch ORDER BY marks DESC),
19 DENSE_RANK() OVER(PARTITION BY branch ORDER BY marks DESC)
```

Result Grid

	student_id	name	branch	marks	RANK() OVER(PARTITION BY branch ORDER BY marks DESC)	DENSE_RANK() OVER(PARTITION BY branch ORDER BY marks DESC)
▶	7	Deepak	CSE	98	1	1
	8	Arpan	CSE	95	2	2
	5	Shubham	CSE	78	3	3
	6	Ved	CSE	43	4	4
	9	Vinay	ECE	95	1	1
	12	Rohit	ECE	95	1	1
	10	Ankit	ECE	88	3	2

Result 21 x

Output

Action Output

#	Time	Action	Message
✓ 185	20:22:57	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t	16 row(s) returned
✓ 186	20:23:17	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t W...	8 row(s) returned
✓ 187	20:23:40	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t W...	8 row(s) returned
✓ 188	20:26:59	SELECT *, RANK() OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
✓ 189	20:27:44	SELECT *, RANK() OVER(PARTITION BY branch ORDER BY marks DESC) FROM marks	16 row(s) returned
✓ 190	20:30:04	SELECT *, RANK() OVER(PARTITION BY branch ORDER BY marks DESC), DENSE_RANK() OVER(PARTIT...	16 row(s) returned

Object Info Session

No object selected

Administration Schemas

Information

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 10* marks

Limit to 1000 rows

SCHEMAS

Filter objects

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- Tables
 - airports
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 - marks
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flights

flipkart

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sql_live

sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

Information

No object selected

Object Info Session

```
18 RANK() OVER(PARTITION BY branch ORDER BY marks DESC),
19 DENSE_RANK() OVER(PARTITION BY branch ORDER BY marks DESC)
20 FROM marks;
21
22 • SELECT *,
23 ROW_NUMBER() OVER(PARTITION BY branch)
24 FROM marks
```

Result Grid

student_id	name	branch	marks	ROW_NUMBER() OVER(PARTITION BY branch)
7	Deepak	CSE	98	1
8	Arpan	CSE	95	2
5	Shubham	CSE	78	3
6	Ved	CSE	43	4
9	Vinay	ECE	95	1
10	Ankit	ECE	88	2
11	Anand	ECE	81	3

Result 23 x


Output

Action Output

#	Time	Action	Message
187	20:23:40	SELECT * FROM (SELECT *, AVG(marks) OVER(PARTITION BY branch) AS 'branch_avg' FROM marks) t W...	8 row(s) returned
188	20:26:59	SELECT *, RANK() OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
189	20:27:44	SELECT *, RANK() OVER(PARTITION BY branch ORDER BY marks DESC) FROM marks	16 row(s) returned
190	20:30:04	SELECT *, RANK() OVER(PARTITION BY branch ORDER BY marks DESC), DENSE_RANK() OVER(PARTIT...	16 row(s) returned
191	20:32:05	SELECT *, ROW_NUMBER() OVER() FROM marks	16 row(s) returned
192	20:32:27	SELECT *, ROW_NUMBER() OVER(PARTITION BY branch) FROM marks	16 row(s) returned

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks orders

SCHEMAS

Filter objects

- campusx
- flights
- flipkart
- indigo
- ipl
- maang
- mydb
- phpmyadmin
- sample
- sql_cx_live
- sql_tasks
- swiggy
- temp_db
- test
- tinder
- zomato
 - Tables
 - delivery_partner
 - duplicate_orders
 - duplicates
 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users

Administration Schemas

Information

No object selected

Object Info Session

SQL File 10* marks orders

Limit to 1000 rows

```
1 USE zomato;
2
3 • SELECT * FROM orders
```

Result Grid

	order_id	user_id	r_id	amount	date	partner_id	delivery_time	delivery_rating	restaurant_rating
▶	1001	1	1	550	2022-05-10	1	25	5	3
	1002	1	2	415	2022-05-26	1	19	5	2
	1003	1	3	240	2022-06-15	5	29	4	5
	1004	1	3	240	2022-06-29	4	42	3	5
	1005	1	3	220	2022-07-10	1	58	1	4
	1006	2	1	550	2022-06-10	2	16	5	5
	1007	2	2	550	2022-06-23	3	60	1	5
	1008	2	3	240	2022-07-07	5	33	4	5

orders 2 x

Output

Action Output

#	Time	Action	Message
✓ 191	20:32:05	SELECT *, ROW_NUMBER() OVER() FROM marks	16 row(s) returned
✓ 192	20:32:27	SELECT *, ROW_NUMBER() OVER(PARTITION BY branch) FROM marks	16 row(s) returned
✓ 193	20:33:58	SELECT *, CONCAT(branch, ',', ROW_NUMBER() OVER(PARTITION BY branch)) FROM marks	16 row(s) returned
✓ 194	20:36:11	SELECT * FROM zomato.orders LIMIT 0, 1000	25 row(s) returned
✓ 195	20:37:23	USE zomato	0 row(s) affected
✓ 196	20:37:34	SELECT * FROM orders LIMIT 0, 1000	25 row(s) returned



MySQL Workbench

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Navigator SQL File 10* marks orders

SCHEMAS

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- sql_tasks
- swiggy
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 - food
 - loyal_users
 - menu
 - order_details
 - orders
 - restaurants
 - users

Administration Schemas

Information

No object selected

```
1 USE zomato;
2
3 • SELECT MONTHNAME(date),user_id,SUM(amount)
4 FROM orders
5 GROUP BY MONTHNAME(date),user_id
6 ORDER BY MONTH(date)
```

Result Grid

	MONTHNAME(date)	user_id	SUM(amount)
	May	3	860
	May	4	600
▶	May	1	965
	June	3	480
	June	2	1480
	June	4	800
	June	1	480
	July	4	400


Result 7

Output

Action Output

#	Time	Action	Message
✓ 196	20:37:34	SELECT * FROM orders LIMIT 0, 1000	25 row(s) returned
✓ 197	20:38:38	SELECT MONTH(date) FROM orders LIMIT 0, 1000	25 row(s) returned
✓ 198	20:38:44	SELECT date,MONTH(date) FROM orders LIMIT 0, 1000	25 row(s) returned
✓ 199	20:38:57	SELECT date,MONTH(date),MONTHNAME(date) FROM orders LIMIT 0, 1000	25 row(s) returned
✓ 200	20:39:33	SELECT MONTHNAME(date),user_id,SUM(amount) FROM orders GROUP BY MONTHNAME(date),user_id L...	11 row(s) returned
✓ 201	20:40:01	SELECT MONTHNAME(date),user_id,SUM(amount) FROM orders GROUP BY MONTHNAME(date),user_id ...	11 row(s) returned

Object Info Session



MySQL Workbench

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Navigator SQL File 10* marks orders

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 - loyal_users
 - menu
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 - restaurants
 - users

Administration Schemas

Information

No object selected

```
3 SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS 'total',
4 RANK() OVER(PARTITION BY MONTHNAME(date) ORDER BY SUM(amount) DI
5 FROM orders
6 GROUP BY MONTHNAME(date),user_id
7 ORDER BY MONTH(date)) t
8 WHERE t.month_rank < 3
9 ORDER BY month DESC,month_rank ASC
```

Result Grid

	month	user_id	total	month_rank
▶	May	1	965	1
	May	3	860	2
	June	2	1480	1
	June	4	800	2
	July	5	3035	1
	July	2	1190	2


Result 12 x

Output

Action Output

#	Time	Action	Message
201	20:40:01	SELECT MONTHNAME(date),user_id,SUM(amount) FROM orders GROUP BY MONTHNAME(date),user_id ...	11 row(s) returned
202	20:41:10	SELECT MONTHNAME(date),user_id,SUM(amount), RANK() OVER(PARTITION BY MONTHNAME(date) OR...	11 row(s) returned
203	20:41:46	SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS 'total', RANK() OVER(PARTITION BY MO...	11 row(s) returned
204	20:42:13	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS 'total', RANK() OVER(P...	11 row(s) returned
205	20:42:43	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS 'total', RANK() OVER(P...	6 row(s) returned
206	20:43:11	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS 'total', RANK() OVER(P...	6 row(s) returned

Object Info Session



27 February 2023 16:56

1. Find the branch toppers
2. FRAME Clause
3. Find the last guy of each branch
4. Alternate way of writing Window functions
5. Find the 2nd last guy of each branch, 5th topper of each branch



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Navigator SQL File 10* marks orders

SCHEMAS

Filter objects

campusx

- Tables
 - airports
 - flights
 - ipl
 - marks
 - null_sample
 - smartphones
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sample

sql_ox_live

sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

Information

No object selected

Object Info Session

```
7 ORDER BY MONTH(date)) t
8 WHERE t.month_rank < 3
9 ORDER BY month DESC, month_rank ASC;
10
11 • USE campusx;
12
13 • SELECT * FROM marks
```

Result Grid

	student_id	name	branch	marks
▶	1	Nitish	EEE	82
	2	Rishabh	EEE	91
	3	Anukant	EEE	69
	4	Rupesh	EEE	55
	5	Shubham	CSE	78
	6	Ved	CSE	43
	7	Deepak	CSE	98
	8	Arnav	CSF	95

marks 13 x

Output

Action Output

#	Time	Action	Message
✓ 203	20:41:46	SELECT MONTHNAME(date) AS 'month', user_id, SUM(amount) AS 'total', RANK() OVER(PARTITION BY MO...	11 row(s) returned
✓ 204	20:42:13	SELECT * FROM (SELECT MONTHNAME(date) AS 'month', user_id, SUM(amount) AS 'total', RANK() OVER(P...	11 row(s) returned
✓ 205	20:42:43	SELECT * FROM (SELECT MONTHNAME(date) AS 'month', user_id, SUM(amount) AS 'total', RANK() OVER(P...	6 row(s) returned
✓ 206	20:43:11	SELECT * FROM (SELECT MONTHNAME(date) AS 'month', user_id, SUM(amount) AS 'total', RANK() OVER(P...	6 row(s) returned
✓ 207	20:46:35	USE campusx	0 row(s) affected
✓ 208	20:46:45	SELECT * FROM marks LIMIT 0, 1000	16 row(s) returned



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 10* marks orders

Limit to 1000 rows

SCHEMAS

Filter objects

campusx

- Tables
 - airports
 - flights
 - ipl
 - marks
 - null_sample
 - smartphones
 - users
- Views
- Stored Procedures
- Functions

flights

flipkart

indigo

ipl

maang

mydb

phpmyadmin

sample

sql_ox_live

sql_tasks

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tinder

zomato

Administration Schemas

Information

No object selected

```
11 • USE campusx;
12
13 • SELECT * FROM marks;
14
15 • SELECT *,
16     FIRST_VALUE(name) OVER(ORDER BY marks DESC)
17 FROM marks
```

Result Grid

	student_id	name	branch	marks	FIRST_VALUE(name) OVER(ORDER BY marks DESC)
▶	7	Deepak	CSE	98	Deepak
	12	Rohit	ECE	95	Deepak
	8	Arpan	CSE	95	Deepak
	9	Vinay	ECE	95	Deepak
	2	Rishabh	EEE	91	Deepak
	10	Ankit	ECE	88	Deepak
	1	Nitish	EEE	82	Deepak

Result 14 x

Output


Action Output

#	Time	Action	Message
✓ 204	20:42:13	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total', RANK() OVER(P...	11 row(s) returned
✓ 205	20:42:43	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total', RANK() OVER(P...	6 row(s) returned
✓ 206	20:43:11	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total', RANK() OVER(P...	6 row(s) returned
✓ 207	20:46:35	USE campusx	0 row(s) affected
✓ 208	20:46:45	SELECT * FROM marks LIMIT 0, 1000	16 row(s) returned
✓ 209	20:48:41	SELECT *, FIRST_VALUE(name) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned

Object Info Session

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks orders

Limit to 1000 rows

SCHEMAS

Filter objects

campusx

- Tables
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sample

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sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

Information

No object selected

Object Info Session

```
10
11 • USE campusx;
12
13 • SELECT * FROM marks;
14
15 • SELECT *,
16 FIRST_VALUE(marks) OVER(ORDER BY marks DESC)
```

Result Grid

	student_id	name	branch	marks	FIRST_VALUE(marks) OVER(ORDER BY marks DESC)
	14	Amit	MECH	69	98
	3	Anukant	EEE	69	98
	4	Rupesh	EEE	55	98
	16	Gautam	MECH	51	98
	6	Ved	CSE	43	98
	15	Sunny	MECH	39	98

Result 15 x

Output

Action Output

#	Time	Action	Message
205	20:42:43	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total', RANK() OVER(P...	6 row(s) returned
206	20:43:11	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total', RANK() OVER(P...	6 row(s) returned
207	20:46:35	USE campusx	0 row(s) affected
208	20:46:45	SELECT * FROM marks LIMIT 0, 1000	16 row(s) returned
209	20:48:41	SELECT *, FIRST_VALUE(name) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
210	20:49:02	SELECT *, FIRST_VALUE(marks) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks orders

Limit to 1000 rows

SCHEMAS

Filter objects

campusx

- Tables
 - airports
 - flights
 - ipl
 - marks
 - null_sample
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sql_ox_live

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Administration Schemas

Information

No object selected

```
15 • SELECT *,
16 FIRST_VALUE(marks) OVER(ORDER BY marks DESC)
17 FROM marks;
18
19 • SELECT *,
20 LAST_VALUE(marks) OVER(ORDER BY marks DESC)
21 FROM marks
```

Result Grid

student_id	name	branch	marks	LAST_VALUE(marks) OVER(ORDER BY marks DESC)
7	Deepak	CSE	98	98
8	Arpan	CSE	95	95
9	Vinay	ECE	95	95
12	Rohit	ECE	95	95
2	Rishabh	EEE	91	91
10	Ankit	ECE	88	88
1	Nitish	EEE	82	82

Result 16 x

Output


Action Output

#	Time	Action	Message
206	20:43:11	SELECT * FROM (SELECT MONTHNAME(date) AS 'month',user_id,SUM(amount) AS total, RANK() OVER(P...	6 row(s) returned
207	20:46:35	USE campusx	0 row(s) affected
208	20:46:45	SELECT * FROM marks LIMIT 0, 1000	16 row(s) returned
209	20:48:41	SELECT *, FIRST_VALUE(name) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
210	20:49:02	SELECT *, FIRST_VALUE(marks) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
211	20:50:03	SELECT *, LAST_VALUE(marks) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned

Object Info Session

Result Grid

Form Editor



MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 10* marks orders

Limit to 1000 rows

SCHEMAS

Filter objects

campusx

- Tables
 - airports
 - flights
 - ipl
 - marks
 - null_sample
 - smartphones
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- Views
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- Functions

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phpmyadmin

sample

sql_ox_live

sql_tasks

swiggy

temp_db

test

tinder

zomato

Administration Schemas

Information

No object selected

```
23 FROM marks;
24
25 • SELECT *,
26 NTH_VALUE(name,2) OVER(PARTITION BY branch
27 ORDER BY marks DESC
28 ROWS BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING)
29 FROM marks
```

Result Grid

student_id	name	branch	marks	NTH_VALUE(name,2) OVER(PARTITION BY branch ORDER BY marks DESC ROWS BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING)
7	Deepak	CSE	98	Arpan
8	Arpan	CSE	95	Arpan
5	Shubham	CSE	78	Arpan
6	Ved	CSE	43	Arpan
17	Rohit	ECE	95	Vinay


Result 23 x

Output

Action Output

#	Time	Action	Message
213	20:57:47	SELECT *, LAST_VALUE(marks) OVER(ORDER BY marks DESC) FROM marks	16 row(s) returned
214	21:01:09	SELECT *, LAST_VALUE(marks) OVER(ORDER BY marks DESC ROWS BETWEEN UNBOUNDED PREC...	16 row(s) returned
215	21:01:30	SELECT *, LAST_VALUE(marks) OVER(PARTITION BY branch ORDER BY marks DESC ROWS BETWEEN...	16 row(s) returned
216	21:01:44	SELECT *, LAST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC ROWS BETWEEN...	16 row(s) returned
217	21:02:03	SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC ROWS BETWEEN...	16 row(s) returned
218	21:04:54	SELECT *, NTH_VALUE(name,2) OVER(PARTITION BY branch ORDER BY marks DESC ROWS BETWEEN...	16 row(s) returned

Object Info Session



MySQL Workbench

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File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 10* marks orders

SCHEMAS

Filter objects

campusx

- Tables
 - airports
 - flights
 - ipl
 - marks
 - null_sample
 - smartphones
 - users
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flights

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Administration Schemas

Information

No object selected

```
29 FROM marks;
30
31 SELECT name,branch,marks FROM (SELECT *,
32 FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC) AS 'topper_name'
33 FIRST_VALUE(marks) OVER(PARTITION BY branch ORDER BY marks DESC) AS 'topper_marks'
34 FROM marks) t
35 WHERE t.name = t.topper_name AND t.marks = t.topper_marks
```

Result Grid

name	branch	marks
Deepak	CSE	98
Vinay	ECE	95
Rishabh	EEE	91
Prashant	MECH	75


Result 32 x

Output

Action Output

#	Time	Action	Message
222	21:07:56	SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks) FROM marks	16 row(s) returned
223	21:08:04	SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC) FROM marks	16 row(s) returned
224	21:08:27	SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC), FIRST_VALUE(m...	16 row(s) returned
225	21:08:51	SELECT * FROM (SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC)...	16 row(s) returned
226	21:09:40	SELECT * FROM (SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDER BY marks DESC) ...	4 row(s) returned
227	21:09:58	SELECT name,branch,marks FROM (SELECT *, FIRST_VALUE(name) OVER(PARTITION BY branch ORDE...	4 row(s) returned

Object Info Session



27 February 2023 17:12

Find the MoM revenue growth of Zomato

MySQL Workbench

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File Edit View Query Database Server Tools Scripting Help

SQL File 10* marks orders

Limit to 1000 rows

SCHEMAS

Filter objects

campusx

- airports
- flights
- ipl
- marks
- null_sample
- smartphones
- users

Views

- Stored Procedures
- Functions

flights

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zomato

Tables

Administration Schemas

Information

No object selected

Object Info Session

27

28

29

30

31

32

33

ORDER BY marks DESC

ROWS BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING)

FROM marks;

• SELECT *,

LAG(marks) OVER(ORDER BY student_id)

FROM marks

Result Grid

Filter Rows:

Exports

Wrap Cell Contents

	student_id	name	branch	marks	LAG(marks) OVER(ORDER BY student_id)
▶	1	Nitish	EEE	82	82
	2	Rishabh	EEE	91	82
	3	Anukant	EEE	69	91
	4	Rupesh	EEE	55	69
	5	Shubham	CSE	78	55
	6	Ved	CSE	43	78
	7	Deepak	CSE	98	43

Result 35 x

Output

Action Output

#	Time	Action	Message
✓	228 21:10:39	SELECT name,branch,marks FROM (SELECT *, LAST_VALUE(name) OVER(PARTITION BY branch ORDER...	4 row(s) returned
✗	229 21:12:12	SELECT name,branch,marks FROM (SELECT *, LAST_VALUE(name) OVER w AS topper_name', LAST_VAL...	Error Code: 4009. Window specification with name 'w' is not defin...
✗	230 21:13:12	SELECT name,branch,marks FROM (SELECT *, LAST_VALUE(name) OVER w AS topper_name', LAST_VAL...	Error Code: 1064. You have an error in your SQL syntax; check t...
✗	231 21:14:02	SELECT name,branch,marks FROM (SELECT *, LAST_VALUE(name) OVER w AS topper_name', LAST_VAL...	Error Code: 4009. Window specification with name 'w' is not defin...
✓	232 21:16:52	SELECT * FROM marks LIMIT 0, 1000	16 row(s) returned
✓	233 21:17:49	SELECT *, LAG(marks) OVER(ORDER BY student_id) FROM marks	16 row(s) returned

Result Grid

Form Editor

MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator SQL File 10* marks orders

Limit to 1000 rows

ROWS BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING)

```
28
29 FROM marks;
30
31 • SELECT *,
32 LAG(marks) OVER(PARTITION BY branch ORDER BY student_id),
33 LEAD(marks) OVER(PARTITION BY branch ORDER BY student_id)
34 FROM marks
```

Result Grid

	student_id	name	branch	marks	LAG(marks) OVER(PARTITION BY branch ORDER BY student_id)	LEAD(marks) OVER(PARTITION BY branch ORDER BY student_id)
	5	Shubham	CSE	78	NULL	43
	6	Ved	CSE	43	78	98
	7	Deepak	CSE	98	43	95
	8	Arpan	CSE	95	98	NULL
	9	Vinay	ECE	95	NULL	88
	10	Ankit	ECE	88	95	81
	11	Anand	ECE	81	88	95

Result 37 x

Output

Action Output

#	Time	Action	Message
230	21:13:12	SELECT name,branch,marks FROM (SELECT *, LAST_VALUE(name) OVER w AS topper_name', LAST_VAL...	Error Code: 1064. You have an error in your SQL syntax; check t
231	21:14:02	SELECT name,branch,marks FROM (SELECT *, LAST_VALUE(name) OVER w AS topper_name', LAST_VAL...	Error Code: 4009. Window specification with name 'w' is not defin
232	21:16:52	SELECT * FROM marks LIMIT 0, 1000	16 row(s) returned
233	21:17:49	SELECT *, LAG(marks) OVER(ORDER BY student_id) FROM marks	16 row(s) returned
234	21:18:51	SELECT *, LAG(marks) OVER(ORDER BY student_id), LEAD(marks) OVER(ORDER BY student_id) FROM m...	16 row(s) returned
235	21:19:26	SELECT *, LAG(marks) OVER(PARTITION BY branch ORDER BY student_id), LEAD(marks) OVER(PARTITI...	16 row(s) returned

Object Info Session


No object selected

Administration Schemas

Information

Result Grid

Form Editor



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OneNote for Windows 10

Nitish Singh

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DSMP 2022-23

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Database...

SQL DDL...

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What are Window Functions?

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27 February 2023 17:12

Find the MoM revenue growth of ZomatoI

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MySQL Workbench

campusx - Warning - not supp...

File Edit View Query Database Server Tools Scripting Help

Navigator: SQL File 10* marks orders

Limit to 1000 rows

36 • USE zomato;

37

38 • SELECT MONTHNAME(date), SUM(amount),

39 ((SUM(amount) - LAG(SUM(amount)) OVER(ORDER BY MONTH(date))))/LAG(SUM(amount)) OVER(ORDER BY MONTH(date)))

40 FROM orders

41 GROUP BY MONTHNAME(date)

42 ORDER BY MONTH(date) ASC

Result Grid

	MONTHNAME(date)	SUM(amount)	((SUM(amount) - LAG(SUM(amount)) OVER(ORDER BY MONTH(date))))/LAG(SUM(amount)) OVER(ORDER BY MONTH(date))) * 100
	May	2425	100
	June	3220	32.7835
	July	4845	50.4638

Result 44 x

Output

Action Output

#	Time	Action	Message
239	21:22:00	SELECT MONTHNAME(date), SUM(amount) FROM orders GROUP BY MONTHNAME(date) LIMIT 0, 1000	3 row(s) returned
240	21:22:15	SELECT MONTHNAME(date), SUM(amount) FROM orders GROUP BY MONTHNAME(date) ORDER BY MO...	3 row(s) returned
241	21:23:58	SELECT MONTHNAME(date), SUM(amount), LAG(SUM(amount)) OVER(ORDER BY MONTH(date)) FROM or...	3 row(s) returned
242	21:24:32	SELECT MONTHNAME(date), SUM(amount), SUM(amount) - LAG(SUM(amount)) OVER(ORDER BY MONTH(...	3 row(s) returned
243	21:25:01	SELECT MONTHNAME(date), SUM(amount), (SUM(amount) - LAG(SUM(amount)) OVER(ORDER BY MONTH...	3 row(s) returned
244	21:25:20	SELECT MONTHNAME(date), SUM(amount), ((SUM(amount) - LAG(SUM(amount)) OVER(ORDER BY MONT...	3 row(s) returned

Object Info Session

No object selected

Administration Schemas

Information

Result Grid

Form Editor

