

```
-- 06/05/2022
```

```
-- Aggregate Funtions
```

```
-- count--
```

```
select COUNT(customerNumber) as No_of_Customers,paymentDate from payments group  
by paymentDate;
```

```
1  -- 06/05/2022
2  -- Aggregate Funtions
3
4  -- count--
5  • select COUNT(customerNumber) as No_of_Customers,paymentDate from payments group by paymentDate;
6
7  -- max---
```

100% 1:6

Result Grid Filter Rows: Search Export:

	No_of_Customers	paymentDate
▶ 1	1	2004-10-19
1	1	2003-06-05
1	1	2004-12-18
2	2	2004-12-17
1	1	2003-06-06
1	1	2004-08-20
1	1	2003-05-20
1	1	2004-12-15
1	1	2003-05-31
1	1	2004-03-10
2	2	2004-11-14
1	1	2004-08-08
1	1	2005-02-22
1	1	2003-02-16
1	1	2003-10-28
1	1	2004-11-04

```
-- max---
```

```
select MAX(customerNumber) as Max_No_of_Customers,paymentDate from payments  
group by paymentDate order by Max_No_of_Customers desc;
```

```
6
7  -- max---
```

```
8  • select MAX(customerNumber) as Max_No_of_Customers,paymentDate from payments group by paymentDate order by Max_No_of_Customers desc;
9
10
```

100% 1:9

Result Grid Filter Rows: Search Export:

	Max_No_of_Customers	paymentDate
▶ 496	496	2004-12-31
496	496	2005-05-25
496	496	2003-07-16
495	495	2003-12-26
495	495	2004-05-14
489	489	2003-12-04
489	489	2004-01-31
487	487	2003-09-28
487	487	2004-02-29
486	486	2004-04-14
486	486	2004-11-23
486	486	2003-03-20
484	484	2004-10-26

```
-- min---
```

```
select min(customerNumber) as min_No_of_Customers,paymentDate from payments group  
by paymentDate order by min_No_of_Customers ;
```

```

11 -- min--
12 • select min(customerNumber) as min_No_of_Customers,paymentDate from payments group by paymentDate order by min_No_of_Customers ;
13

```

00% 1:13

Result Grid Filter Rows: Search Export:

	min_No_of_Custom...	paymentDate
▶ 103		2004-10-19
103		2003-06-05
103		2004-12-18
112		2004-12-17
112		2003-06-06
112		2004-08-20
114		2003-05-20
114		2004-12-15
114		2003-05-31
114		2004-03-10
119		2004-11-14
119		2004-08-08
119		2005-02-22
121		2003-02-16
121		2003-10-28
121		2004-11-04
121		2004-11-28

-- avg --

```

select round(avg(amount)) as AvgAmount,paymentDate from payments group by
paymentDate order by AvgAmount;

```

```

15 -- avg --
16 • select round(avg(amount)) as AvgAmount,paymentDate from payments group by paymentDate order by AvgAmount;
17

```

100% 1:17

Result Grid Filter Rows: Search Export:

	AvgAmount	paymentDate
▶ 615		2005-05-18
1128		2003-08-22
1491		2003-10-28
1628		2003-04-19
1676		2004-12-18
1680		2004-04-30
1835		2005-01-29
1961		2004-09-09
2612		2004-08-11
2880		2003-07-05
3101		2003-05-09
3453		2005-03-02
3475		2004-10-26
3516		2005-03-27
4424		2004-09-24
4711		2004-07-03
5495		2003-01-30

-- sum--

```

select round(sum(amount)) as TotalAmount,paymentDate from payments group by
paymentDate order by TotalAmount;

```

```

19  -- sum--
20  • select round(sum(amount)) as TotalAmount, paymentDate from payments group by paymentDate order by TotalAmount;
21

```

100% 1:21

Result Grid Filter Rows: Search Export:

	TotalAmount	paymentDate
▶ 615	2005-05-18	
1128	2003-08-22	
1491	2003-10-28	
1628	2003-04-19	
1676	2004-12-18	
1680	2004-04-30	
1835	2005-01-29	
1961	2004-09-09	
2612	2004-08-11	
2880	2003-07-05	
3101	2003-05-09	
3453	2005-03-02	
3475	2004-10-26	

--- CASE WHEN---

```

Select amount,
case
when amount > 100000 then "High"
when amount > 50000 and amount <100000 then "Medium"
when amount <50000 then "low"
else "very less"
end as AmountStatus
from payments;

```

```

-- CASE WHEN--

Select amount,
case
when amount > 100000 then "High"
when amount > 50000 and amount <100000 then "Medium"
when amount <50000 then "low"
29 else "very less"
30 end as AmountStatus
31 from payments;
32

```

100% 1:21

Result Grid Filter Rows: Search Export:

	amount	Amou...
▶	6066.78	low
	14571.44	low
	1676.14	low
	14191.12	low
	32641.98	low
	33347.88	low
	45864.03	low
	82261.22	Medium
	7565.08	low
	44894.74	low
	19501.82	low
	47924.19	low
	49523.67	low
	50218.95	Medium
	1491.38	low
	17876.32	low

-- SubQueries

-- to return second maximum amount

```
select max(amount) as SecondMax from payments where amount < (select max(amount)
from payments);
```

```

38  -- to dates which has amount higher than average
39  • select amount,paymentDate from payments where amount>(select avg(amount) from payments) ;
40
41
42

```

100% 1:40

Result Grid Filter Rows: Search Export:

	amount	paymentDate
▶ 32641.98	2003-06-06	
33347.88	2004-08-20	
45864.03	2003-05-20	
82261.22	2004-12-15	
44894.74	2004-03-10	
47924.19	2004-08-08	
49523.67	2005-02-22	
50218.95	2003-02-16	
34638.14	2004-11-28	
101244.59	2005-03-05	
85410.87	2004-08-28	
83598.04	2005-04-16	
47142.70	2004-12-27	
55639.66	2004-11-02	
111654.40	2003-08-15	

```
-- to get dates which has amount higher than average
select amount,paymentDate from payments where amount>(select avg(amount) from
payments) ;
```

```

42
43  • select customerNumber,city from
44  (select customerNumber,customerName,city,country from customers where city="Paris"or city="NYC")as tab1;
45
46

```

100% 1:44

Result Grid Filter Rows: Search Export:

	customerNumb...	city
▶ 131	NYC	
151	NYC	
172	Paris	
181	NYC	
250	Paris	
406	Paris	
424	NYC	
456	NYC	

```
select customerNumber,city from
(select customerNumber,customerName,city,country from customers where city="Paris"or
city="NYC")as tab1;
```

```

33  -- SubQueries
34
35  -- to return second maximum amount
36  • select max(amount) as SecondMax from payments where amount < (select max(amount) from payments);
37

```

100% 1:32

Result Grid Filter Rows: Search Export:

SecondMax
▶ 116208.40

---String functions---

```

select length("hello");
select lower("HELLO");
select upper("hi guys");
select ltrim(" hi guys"); # removes whitespace from left side
select rtrim("hi guys. "); # removes whitespace from right side
select trim("    hi guys "); # removes whitespace from both sides
SELECT REPLACE('SQL Tutorial', 'SQL', 'MYSQL');
SELECT CONCAT('SQL', ' is', ' fun!', ' in', 'ways');
SELECT SUBSTRING(customerName, 1, 10) AS ExtractString from customers;

```

```

-- String functions
• select length("hello");
• select lower("HELLO");
• select upper("hi guys");
• select ltrim(" hi guys"); # removes whitespace from left side
• select rtrim("hi guys. "); # removes whitespace from right side
• select trim("    hi guys "); # removes whitespace from both sides
• SELECT REPLACE('SQL Tutorial', 'SQL', 'MYSQL');
• SELECT CONCAT('SQL', ' is', ' fun!', ' in', 'ways');
• SELECT SUBSTRING(customerName, 1, 10) AS ExtractString from customers;

-- List Aggregation doesnt work in MYSQL

```

-- Mathematic Functions

```

Select ceil(45.5),floor(45.5),round(45.5),power(45.5,2);
select rand(5);

```

```

60 • select ceil(45.5), floor(45.5), round(45.5), power(45.5, 2);
61 • select rand(5);

```

100% 1:60

Result Grid Filter Rows: Search Export:

	ceil(45.5)	floor(...	round(45....	power(45.5,2)
▶ 46	45	46	2070.25	

```

-- date time functions
select current_timestamp();
SELECT current_date();
SELECT curdate();

```

```

63 -- date time functions
64 • select current_timestamp();
65 • SELECT current_date();
66 • SELECT curdate();
67

```

130% 23:65

Result Grid Filter Rows: Search Export:

	curdate()
▶ 2022-05-06	

```

-- EXTRACT FUNTION
SELECT EXTRACT(DAY FROM "2017-06-15");
SELECT EXTRACT(WEEK FROM "2017-06-15");
SELECT EXTRACT(MONTH FROM "2017-06-15");
SELECT EXTRACT(YEAR FROM "2017-06-15");




```

```

68      -- EXTRACT FUNTION
69 •    SELECT EXTRACT(DAY FROM "2017-06-15");
70 •    SELECT EXTRACT(WEEK FROM "2017-06-15");
71 •    SELECT EXTRACT(MONTH FROM "2017-06-15");
72 •    SELECT EXTRACT(YEAR FROM "2017-06-15");
73
74
75
76

```

100% 34:72

Result Grid   Filter Rows: Export: 

	EXTRACT(YEAR FROM "2017-06-15")
▶ 2017	

--- PATTERN MATCHING---




SELECT customerName from customers where customerName like 'A%';
 SELECT customerName from customers where customerName like 'A_s%';

```

74      -- PATTERN MATCHING
75
76 •    SELECT customerName from customers where customerName like 'A%';
77 •    SELECT customerName from customers where customerName like 'A_s%';
78
79
80

```

130% 67:77

Result Grid   Filter Rows: Export: 

customerName
▶ Australian Collectors, Co.
Australian Gift Network, Co
Australian Collectables, Ltd