

SQL ASSIGNMENT 1

#1

```
select * from city where population > 100000 and countrycode = 'USA';
12  #1
13 • select * from city where population > 100000 and countrycode = 'USA';
14  #2
```

100% 35:13

Result Grid Filter Rows: Search Export:

id	name	countryco...	district	population
3815	El Paso	USA	Texas	563662
3878	Scottsdale	USA	Arizona	202705
3965	Corona	USA	California	124966
3973	Concord	USA	California	121780
3977	Cedar Rapids	USA	Iowa	120758
3982	Coral Springs	USA	Florida	117549

#2

```
select name from city where population > 120000 and countrycode = 'USA';
14  #2
15 • select name from city where population > 120000 and countrycode = 'USA';
16  #3
```

100% 35:15

Result Grid Filter Rows: Search Export:

name
El Paso
Scottsdale
Corona
Concord
Cedar Rapids

#3

```
select * from city;
17 • select * from city;
18  #4
```

100% 16:17

Result Grid Filter Rows: Search Export:

id	name	countryco...	district	population
271	Porto Alegre	BRA	Rio Grande do Sul	1871082
397	Lauro de Freitas	BRA	Bahia	109236
547	Dobric	BGR	Varna	100399
552	Bujumbura	BDI	Bujumbura	300000
554	Santiago de Chile	CHL	Santiago	4703954
626	al-Minya	EGY	al-Minya	201360
646	Santa Ana	SLV	Santa Ana	139389
762	Bahir	Dar	ETH Amhara	96140
796	Bauio	PHL	CAR	252386

#4

```
select * from city where ID = 1661;
```

```

18      #4
19 •   select * from city where ID = 1661;
100%  24:19

Result Grid Filter Rows: Search Export:

```

id	name	countryco...	district	population
1661	Sayama	JPN	Saitama	162472

#5

```

select * from city where countrycode = 'JPN';
21 •   select * from city where countrycode = 'JPN';
22      #6
100%  24:21

```

Result Grid Filter Rows: Search Export:

id	name	countryco...	district	population
1613	Neyagawa	JPN	Osaka	257315
1630	Ageo	JPN	Saitama	209442
1661	Sayama	JPN	Saitama	162472
1681	Omura	JPN	Fukuoka	142889
1739	Tokuyama	JPN	Yamaguchi	107078

#6

```

select name from city where countrycode = 'JPN';
22      #6
23 •   select name from city where countrycode = 'JPN';
24
100%  20:23

```

Result Grid Filter Rows: Search Export:

name
Neyagawa
Ageo
Sayama
Omura
Tokuyama

#7
select distinct city,state from station;

33

34 #7

35 • **select distinct city,state from station;**

100% 22:35

Result Grid



Filter Rows:



Search

Export:



city	state
Loma Mar	CA
Sandy Hook	CT
Tipton	IN
Arlington	CO
Turner	AR
Slidell	LA
Negreet	LA

#8

select distinct city from station where id%2=0;

36 #8

37 • **select distinct city from station where id%2=0;**

38 #9

100% 35:37

Result Grid



Filter Rows:



Search

Export:



city
Kissee Mills
Loma Mar
Tipton
Glencoe
Chignik Lagoon
Albany

#9

select count(city)-count(distinct city) as diff from station;

38 #9

39 • **select count(city)-count(distinct city) as diff from station;**

40 #10

100% 24:39

Result Grid



Filter Rows:



Search

Export:



diff
13

```
#10
select city,length from
(SELECT CITY, LENGTH(CITY) AS LENGTH, row_number() over(partition by LENGTH(CITY) order by city) as rn
FROM STATION
WHERE LENGTH(CITY) = (SELECT MIN(LENGTH(CITY)) FROM STATION) OR LENGTH(CITY) = (SELECT MAX(LENGTH(CITY)) FROM STATION)
ORDER BY LENGTH, CITY) t
where rn = 1;
```

```
41 •   select city,length from
42   (SELECT CITY, LENGTH(CITY) AS LENGTH, row_number() over(partition by LENGTH(CITY) order by city) as rn
43   FROM STATION
44   WHERE LENGTH(CITY) = (SELECT MIN(LENGTH(CITY)) FROM STATION) OR LENGTH(CITY) = (SELECT MAX(LENGTH(CITY)) FROM STATION)
45   ORDER BY LENGTH, CITY) t
46   where rn = 1;
47
```

Result Grid Filter Rows: Export:

city	length
Amo	3
Marine On Saint...	23

#11

```
select distinct city from station where lower(substring(city,1,1)) in ('a','e','i','o','u');
```

```
48   #11
49 •   select distinct city from station where lower(substring(city,1,1)) in ('a','e','i','o','u');
50   #12
```

Result Grid Filter Rows: Export:

city
Upperco
Aguanga
Odin
East China
Algonac

#12

```
select distinct city from station where lower(substring(city,-1,1)) in ('a','e','i','o','u');
```

```
50   #12
51 •   select distinct city from station where lower(substring(city,-1,1)) in ('a','e','i','o','u');
52   #13
```

Result Grid Filter Rows: Export:

city
Clesea
Pelahatchie
Dorrance
Cahone
Upperco
Waipahu
Millville
Aguanga
Morenci
South El Monte

#13

```
select distinct city from station where lower(substring(city,1,1)) not in ('a','e','i','o','u');
```

```

52      #13
53 •   select distinct city from station where lower(substring(city,1,1)) not in ('a','e','i','o','u');
54
#14
0%  ◇  50:53 | Result Grid Filter Rows: Search Export:
city
Sandy Hook
Tipton
Turner
Slidell
Negreet
Glencoe
Chelsea
Chignik Lagoon
Pelahatchie

#14
select distinct city from station where lower(substring(city,-1,1)) not in ('a','e','i','o','u');
55 •   select distinct city from station| where lower(substring(city,-1,1)) not in ('a','e','i','o','u');
56
#15
0%  ◇  34:55 | Result Grid Filter Rows: Search Export:
city
Loma Mar
Sandy Hook
Tipton
Arlington
Turner
Slidell
Negreet
Chignik Lagoon
Hanna City
Albany
Monument
Manchester

#15
select distinct city from station where lower(substring(city,1,1)) not in ('a','e','i','o','u') or lower(substring(city,-1,1))
not in ('a','e','i','o','u');
56  #15
57 •   select distinct city from| station where lower(substring(city,1,1)) not in ('a','e','i','o','u') or lower(substring(city,-1,1)) not in ('a','e','i','o','u');
58  #16
59 •   select distinct city from station where lower(substring(city,1,1)) not in ('a','e','i','o','u') and lower(substring(city,-1,1)) not in ('a','e','i','o','u');
60
0%  ◇  26:57 | Result Grid Filter Rows: Search Export:
city
Sandy Hook
Tipton
Arlington
Turner
Slidell
Negreet
Glencoe
Chelsea
Chignik Lagoon
Pelahatchie
Hanna City
Albany
Monument
Manchester
Prescott

#16
select distinct city from station where lower(substring(city,1,1)) not in ('a','e','i','o','u') and lower(substring(city,-
1,1)) not in ('a','e','i','o','u');
58  #16
59 •   select distinct city from station where lower(substring(city,1,1)) not in ('a','e','i','o','u') and lower(substring(city,-1,1)) not in ('a','e','i','o','u');
60
0%  ◇  69:59 | Result Grid Filter Rows: Search Export:
city
Sandy Hook
Tipton
Turner
Slidell
Negreet
Chignik Lagoon
Hanna City
Monument
Manchester
Prescott
Crescent City

```

#17

```

select p.product_id,p.product_name from sales s
inner join product p on s.product_id=p.product_id
where s.sale_date >= '2019-01-01' and s.sale_date <='2019-03-31'
and not exists (
select * from sales s
where s.product_id = p. product_id
and (s.sale_date < '2019-01-01' or s.sale_date > '2019-03-31')
);
82 •   select p.product_id,p.product_name from sales s
83     inner join product p on s.product_id=p.product_id
84       where s.sale_date >= '2019-01-01' and s.sale_date <='2019-03-31'
85   and not exists (
86     select * from sales s
87       where s.product_id = p. product_id
88         and (s.sale_date < '2019-01-01' or s.sale_date > '2019-03-31')
89   );

```

10% 20:88

Result Grid Filter Rows: Search Export:

product_id	product_name
1	S8

```

#18
select distinct viewer_id as id from views
where viewer_id in (select author_id from views) order by 1 ;

```

```

l09 •   select distinct viewer_id as id from views
l10     where viewer_id in (select author_id from views) order by 1 ;
l11

```

10% 24:110

Result Grid Filter Rows: Search Export:

id
4
7

```

#19
select
round(count(case when order_date=customer_pref_delivery_date then 1 else null end)/count(*) * 100,2) as
immediate_percentage
from delivery;

```

```

-- L29 • select
L30   round(count(case when order_date=customer_pref_delivery_date then 1 else null end)/count(*) * 100,2) as immediate_percentage
L31   from delivery;
L32

```

0% 12:131

Result Grid Filter Rows: Search Export:

immediate_percenta...
33.33

#20

```

select ad_id,ifnull(round((sum(case when action = 'Clicked' then 1 else 0 end)/sum(case when action in
('Clicked','Viewed') then 1 else 0 end))*100,2),0) as CTR
from ads
group by ad_id
order by ctr desc,ad_id;

```

100% 25:155

Result Grid Filter Rows: Search Export:

ad_id	CTR
1	66.67
3	50.00
2	33.33
5	0.00

#21

```

with cte as (
select team_id,count(*) as team_size from employee group by team_id)
select employee_id,team_size
from employee e inner join cte on e.team_id = cte.team_id;

```

```

100      (6,9),
167      (6,9);
168      |
169 • with cte as (
170     select team_id, count(*) as team_size from employee group by team_id)
171     select employee_id, team_size
172     from employee e inner join cte on e.team_id = cte.team_id;
173

```

100% 1:168

Result Grid



Filter Rows:

Search

Export:



employee_id	team_size
1	3
2	3
3	3
4	1
5	2
6	2

#22

```

with cte as (select country_id, avg(weather_state), CASE
WHEN AVG(weather_state) <= 15 THEN 'Cold'
WHEN AVG(weather_state) >= 25 THEN 'Hot'
ELSE 'Warm'END AS weather_type
from weather group by country_id)
select country_name, weather_type from cte inner join countries c on cte.country_id=c.country_id;

```

```

212 • with cte as (select country_id, avg(weather_state), CASE
213   WHEN AVG(weather_state) <= 15 THEN 'Cold'
214   WHEN AVG(weather_state) >= 25 THEN 'Hot'
215   ELSE 'Warm'END AS weather_type
216   from weather group by country_id)
217   select country_name, weather_type from cte inner join countries c on cte.country_id=c.country_id;
218

```

100% 10:217

Result Grid



Filter Rows:

Search

Export:



country_name	weather_type
USA	Cold
Australia	Cold
China	Warm
Peru	Warm
Morocco	Hot
Spain	Cold

#23

```

select b.product_id, round(sum(units*price)/sum(units),2) as average_price from unitssold a
inner join prices b on a.product_id=b.product_id and purchase_date between start_date and end_date
group by 1;

```

```

250
251 •   select b.product_id,round(sum(units*price)/sum(units),2) as average_price from unitssold a
252     inner join prices b on a.product_id=b.product_id and purchase_date between start_date and end_date
253     group by 1;
254
100% 12:253

```

Result Grid Filter Rows: Search Export:

product_id	average_price
1	6.96
2	16.96

#24

```

select player_id,min(event_date) as first_login
  from sql_assignment.activity group by 1;

```

1

```

2 •      select player_id,min(event_date) as first_login
3       from sql_assignment.activity group by 1;

```

4

6 52:272

Result Grid Filter Rows: Search Export:

player_id	first_login
1	2016-03-01
2	2017-06-25
3	2016-03-02

#25

```

with cte as (
  select
    player_id,device_id,row_number() over(partition by player_id order by event_date) as rn
  from activity_25)
  select player_id,device_id from cte where rn=1;

```

```

292 • ⊖  with cte as (
293   select
294     player_id,device_id, row_number() over(partition by player_id order by event_date) as rn
295   from activity_25)
296   select player_id,device_id from cte where rn=1;

```

297

100% 43:296

Result Grid Filter Rows: Search Export:

player_id	device_id
1	2
2	3
3	1

#26

```

select * from products;
select product_name,sum(unit) as unit from orders a
inner join products b on a.product_id=b.product_id
where year(order_date)=2020 and month(order_date)=2

```

```

group by product_name
having sum(unit)>=100;

338 •   select * from products;
339 •   select product_name,sum(unit) as unit from orders a
340       inner join products b on a.product_id=b.product_id
341       where year(order_date)=2020 and month(order_date)=2
342       group by product_name
343       having sum(unit)>=100;

```

100% 21:343

Result Grid



Filter Rows:

Search

Export:



product_name	unit
Leetcode Solutions Book	130
Leetcode Kit T-shirt	100

#27

```

SELECT user_id, name, mail
FROM Users
WHERE mail REGEXP '^[A-Za-z][A-Za-z0-9_.-]*@leetcode\.com$';
4 •   SELECT user_id, name, mail
5   FROM Users
6   WHERE mail REGEXP '^[A-Za-z][A-Za-z0-9_.-]*@leetcode\.com$';
7

```

% 1:364

Result Grid



Filter Rows:

Search

Edit:



Export/Import:



user_id	name	mail
1	Winston	winston@leetcode.com
3	Annabelle	bella-@leetcode.com
4	Sally	sally.come@leetcode.com

#28

```

select customer_id, name from customers where customer_id in (
with cte as (
select customer_id,month(order_date) as mon,sum(quantity*price) as sale
from orders_28 a inner join product_28 b
on a.product_id = b.product_id
where order_date between '2020-06-01' and '2020-07-31'

```

```

group by customer_id,month(order_date)
having sum(quantity*price)>=100)
select customer_id from cte
group by customer_id
having count(distinct mon)=2;

3 • - select customer_id, name from customers where customer_id in (
4   - with cte as (
5     select customer_id, month(order_date) as mon, sum(quantity*price) as sale
5       from orders_28 a inner join product_28 b
7         on a.product_id = b.product_id
3           where order_date between '2020-06-01' and '2020-07-31'
9             group by customer_id, month(order_date)
0               having sum(quantity*price)>=100
1                 select customer_id from cte
2                   group by customer_id
3                     having count(distinct mon) =2);
4

```

6 23:433 |

Result Grid Filter Rows: Search Export:

customer_id	name
1	Winston

```

#29
select distinct title from content c
inner join tvprogram t on c.content_id=t.content_id
where kids_content='Y' and year(program_date)=2020 and month(program_date)=06;
0
1 •  select distinct title from content c
2    inner join tvprogram t on c.content_id=t.content_id
3      where kids_content='Y' and year(program_date)=2020 and month(program_date)=06;
%
```

61:473 |

Result Grid Filter Rows: Search Export:

title
Aladdin

```
#30 & 31 select a.id,a.year, COALESCE(npv,0)as npv from queries a
left join npv b on a.id=b.id and a.year=b.year;
```

```
514
```

```
515 •   select a.id,a.year,ifnull(npv,0)as npv from queries a  
516     left join npv b on a.id=b.id and a.year=b.year;  
517
```

100% 39:515

Result Grid



Filter Rows:

Search

Export:



	id	year	npv
	1	2019	113
	2	2008	121
	3	2009	12
	7	2018	0
	7	2019	0
	7	2020	30
	13	2019	40

```
#32
```

```
SELECT EU.unique_id as unique_id,E.name  
FROM Employees E  
LEFT JOIN EmployeeUNI EU ON E.id = EU.id;  
54/ |  
548 •   SELECT EU.unique_id as unique_id,E.name  
549     FROM Employees E  
550     LEFT JOIN EmployeeUNI EU ON E.id = EU.id;  
551
```

100% 5:547

Result Grid



Filter Rows:

Search

Export:



	unique_id	name
	NULL	Alice
	1	Jonathan
	NULL	Bob
	2	Meir
	3	Winston

```
#33
```

```
SELECT U.name, COALESCE(SUM(R.distance),0) AS travelled_distance  
FROM Users_33 U  
left JOIN Rides_33 R ON U.id = R.user_id  
GROUP BY U.id, U.name  
ORDER BY travelled_distance DESC, U.name ASC;
```

```

590 •   SELECT U.name, COALESCE(SUM(R.distance),0) AS travelled_distance
591     FROM Users_33 U
592     left JOIN Rides_33 R ON U.id = R.user_id
593     GROUP BY U.id, U.name
594     ORDER BY travelled_distance DESC, U.name ASC;

```

100% 20:594

Result Grid



Filter Rows:



Search

Export:



name	travelled_distan...
Elvis	450
Lee	450
Bob	317
Jonathan	312
Alex	222
Alice	120
Donald	0

#34

Input for order table is missing

#35

```

select name from MovieRating_35 a
inner join Movies_35 b on a.movie_id=b.movie_id
inner join users_35 c on a.user_id=c.user_id
group by name
order by count(*) desc
limit 1
;
select title from MovieRating_35 a
inner join Movies_35 b on a.movie_id=b.movie_id
inner join users_35 c on a.user_id=c.user_id
where month(created_at)='02' and year(created_at)='2020'
group by title
order by avg(rating) desc,title
limit 1
;

```

```

659
660 •   select name from MovieRating_35 a
661     inner join Movies_35 b on a.movie_id=b.movie_id
662     inner join users_35 c on a.user_id=c.user_id
663     group by name
664     order by count(*) desc
665     limit 1
666 ;

```

100% ▾ 6:665

Result Grid Filter Rows: Search Export: Fetch rows:

name
Daniel

667

```

668 •   select title from MovieRating_35 a
669     inner join Movies_35 b on a.movie_id=b.movie_id
670     inner join users_35 c on a.user_id=c.user_id
671     where month(created_at)='02' and year(created_at)='2020'
672     group by title
673     order by avg(rating) desc,title
674     limit 1
675 ;

```

100% ▾ 14:668

Result Grid Filter Rows: Search Export: Fetch rows:

title
Frozen 2

#36

```

SELECT U.name, COALESCE(SUM(R.distance),0) AS traveled_distance
FROM Users36 U
left JOIN Rides36 R ON U.id = R.user_id
GROUP BY U.id, U.name
ORDER BY traveled_distance DESC, U.name;

```

```

715 •   SELECT U.name, COALESCE(SUM(R.distance), 0) AS traveled_distance
716     FROM Users36 U
717     LEFT JOIN Rides36 R ON U.id = R.user_id
718     GROUP BY U.id, U.name

```

100% ◊ 42:715

Result Grid



Filter Rows:

Search

Export:



name	traveled_distan...
Elvis	450
Lee	450
Bob	317
Jonathan	312
Alex	222
Alice	120
Donald	0

#37

Same as question-32

#38

```

SELECT S.id, S.name
FROM Students S
LEFT JOIN Departments D ON S.department_id = D.id
WHERE D.id IS NULL;
    ↴

```

```

758 •   SELECT S.id, S.name
759     FROM Students S
760     LEFT JOIN Departments D ON S.department_id = D.id
761     WHERE D.id IS NULL;

```

100% ◊ 17:761

Result Grid



Filter Rows:

Search

Export:



id	name
2	John
3	Steve
4	Jasmine
7	Daiana

#39

```

select
case when from_id<to_id then from_id else to_id end as from_id,
case when from_id<to_id then to_id else from_id end as to_id,
count(*) as call_count,

```

```

sum(duration) as total_duration
from calls
group by 1,2;
781 •   select
782     case when from_id<to_id then from_id else to_id end as from_id,
783     case when from_id<to_id then to_id else from_id end as to_id,
784     count(*) as call_count,
785     sum(duration) as total_duration
786   from calls
787   group by 1,2;
788

```

100% 24:785

Result Grid Filter Rows: Search Export:

from_id	to_id	call_count	total_durati...
1	2	2	70
1	3	1	20
3	4	4	999

#40 same as question-23

```

#41
SELECT w.name AS warehouse_name, SUM(p.Width * p.Length * p.Height * w.units) AS volume_cubic_feet
FROM Warehouse w
JOIN Products41 p ON w.product_id = p.product_id
GROUP BY w.name;
o25
824 •   SELECT w.name AS warehouse_name, SUM(p.Width * p.Length * p.Height * w.units) AS volume_cubic_feet
825   FROM Warehouse w
826   JOIN Products41 p ON w.product_id = p.product_id
827   GROUP BY w.name;

```

100% 15:827

Result Grid Filter Rows: Search Export:

warehouse_name	volume_cubic_f...
LCHouse1	12250
LCHouse2	20250
LCHouse3	800

```

#42
SELECT sale_date, SUM(CASE WHEN fruit = 'apples' THEN sold_num ELSE 0 END - CASE WHEN fruit = 'ORANGES'
THEN sold_num ELSE 0 END) AS difference
FROM Sales42
GROUP BY sale_date
ORDER BY sale_date;

```

```

849 •   SELECT sale_date, SUM(CASE WHEN fruit = 'apples' THEN sold_num ELSE 0 END - CASE WHEN fruit = 'ORANGES' THEN sold_num ELSE 0 END) AS difference
850     FROM Sales42
851     GROUP BY sale_date
852     ORDER BY sale_date;
853

```

100% 74:849

Result Grid Filter Rows: Search Export:

sale_date	difference
2020-05-01	2
2020-05-02	0
2020-05-03	20
2020-05-04	-1

#43

with cte as (select a.player_id,datediff(a.event_date,b.event_date) as diff from Activity43 a
join Activity43 b on a.player_id=b.player_id)
select round(count(distinct(case when diff=1 then player_id else null end))/count(distinct player_id),2) as fraction
from cte

```

867
868 •   with cte as (select a.player_id,datediff(a.event_date,b.event_date) as diff from Activity43 a
869     join Activity43 b on a.player_id=b.player_id)
870     select round(count(distinct(case when diff=1 then player_id else null end))/count(distinct player_id),2) as fraction
871     from cte
872     ;
873

```

100% 121:870

Result Grid Filter Rows: Search Export:

fraction
0.33

#44

select m.name from employee44 e
join employee44 m on e.managerid=m.id
group by m.name
having count(*)>=5;

889

```

890 •           select m.name from employee44 e
891                 join employee44 m on e.managerid=m.id
892                 group by m.name
893                 having count(*)>=5;

```

100% 26:893

Result Grid Filter Rows: Search Export:

name
John

```

#45
select * from department;
select dept_name,count(student_id) as cnt from student a
right join department b on a.dept_id=b.dept_id
group by 1;
918
919 •   select * from department;
920 •   select dept_name, count(student_id) as cnt from student a
921     right join department b on a.dept_id=b.dept_id
922     group by 1;

```

100% ▾ 42:920

Result Grid Filter Rows: Search Export:

dept_name	cnt
Engineering	2
Science	1
Law	0

```

#46
SELECT customer_id
FROM Customer46
GROUP BY customer_id
HAVING COUNT(DISTINCT product_key) = (SELECT COUNT(*) FROM Product46);
944

```

```

945 •   SELECT customer_id
946     FROM Customer46
947     GROUP BY customer_id
948     HAVING COUNT(DISTINCT product_key) = (SELECT COUNT(*) FROM Product46);
949
950

```

100% ▾ 69:948

Result Grid Filter Rows: Search Export:

customer_id
1
3

```

#47
with cte as (
select a.project_id,a.employee_id,experience_years,rank() over(partition by a.project_id order by
experience_years desc) as rn
from Project47 a
inner join Employee47 b on a.employee_id=b.employee_id

```

```

order by 1
) select project_id,employee_id from cte where rn=1
order by 1;
977 • with cte as (
978   select a.project_id,a.employee_id,experience_years,rank() over(partition by a.project_id order by experience_years desc) as rn
979   from Project47 a
980   inner join Employee47 b on a.employee_id=b.employee_id
981   order by 1
982 ) select project_id,employee_id from cte where rn=1
983   order by 1;
984

```

100% 11:983 |

Result Grid Filter Rows: Search Export:

project_id	employee_id
1	1
1	3
2	1

#48

Input for order table is missing

#49

```

with cte as
(select *,rank() over(partition by student_id order by grade desc,course_id) as rn from Enrollments)
select student_id,course_id,grade from cte where rn=1;

```

```

33 • with cte as
34   (select *,rank() over(partition by student_id order by grade desc,course_id) as rn from Enrollments)
35   select student_id,course_id,grade from cte where rn=1;
)% 44:1035 |

```

result Grid Filter Rows: Search Export:

student_id	course_id	grade
1	2	99
2	2	95
3	3	82

#50

Questions looks inaccurate