SQL PROJECT – HIRING ABC COMPANY

TASK – 1

Create table shopping_history (

product varchar (20) not null,

quantity int not null,

unit price int not null)

product	quantity	unit_price
milk	3	10
bread	7	3
bread	5	2

product	total_price
milk	30
bread	31

Insert shopping_history values ('milk', 3, 10), ('bread', 7, 3), ('bread', 5, 2)

Select product, sum (total_price) as total_price from (select *, quantity * unit_price as total_price from shopping_history) as t Group by product

TASK – 2

Create table phones (

`name` varchar (20) not null unique,

phone_number int not null unique)

name	phone_number
Jack	1234
Lene	3333
Anna	7582
Mark	9999
NULL	NULL

Insert phones values ('Jack', 1234), ('Lene', 3333), ('Mark', 9999), ('Anna', 7582)

Select * from phones

Create table calls (

id int not null unique,

caller int not null,

callee int not null,

duration int not null)

id	caller	callee	duration
2	7582	3333	3
3	3333	1234	1
7	9999	7582	1
18	9999	3333	4
21	3333	1234	1
25	1234	7582	8
NULL	NULL	NULL	NULL

insert calls values(25,1234,7582,8),(7,9999,7582,1),(18,9999,3333,4),(2,7582,3333,3),(3,3333,1234,1),(21,3333,1234,1)

Select * from calls

With call_details as (select caller as phn_no, sum (duration) as duration from calls group by caller union

Select callee as phn_no, sum (duration) as duration from calls group by callee)

Select p. `name` from phones p join call_details cd on p.phone_number = cd.phn_no group by `name` having sum (duration) >=10

	name	phn_no	duration
▶	Anna	7582	12
	Jack	1234	10

	name
▶	Anna
	Jack

TASK – 2(2nd question)

	name	phone_number
▶	Addison	4315
	John	6356
	Kate	8003
	Ginny	9831
*	NULL	NULL

Create table phones1 (

`name` varchar (20) not null unique,

phone_number int not null unique)

Insert phones1 values ('John', 6356), ('Addison', 4315), ('Kate', 8003), ('Ginny', 9831)

Select * from phones1

Create table calls1 (

id int not null unique,

caller int not null,

callee int not null,

duration int not null)

	id	caller	callee	duration
▶	65	8003	9831	7
	100	9831	8003	3
	145	4315	9831	18
*	NULL	NULL	NULL	NULL

insert calls1 values(65,8003,9831,7),(100,9831,8003,3),(145,4315,9831,18)

Select * from calls1

With call_details1 as

(Select caller as phn_no, sum (duration) as duration from calls1 group by caller

Union

Select callee as phn_no, sum (duration) as duration from calls1 group by callee)

Select p1. `name` from phones1 p1 join call_details1 cd1 on p1.phone_number = cd1.phn_no

Group by `name` having sum (duration) >=10 order by (1)

	name	phn_no	duration
▶	Addison	4315	18
	Ginny	9831	28
	Kate	8003	10

	name
▶	Addison
	Ginny
	Kate

TASK – 3

```
Create table transactions (
amount int not null,
`date` date not null)
Insert transactions values (1000,'2020-01-06'), (-10,'2020-01-14'), (-75,'2020-01-20'),
        (-5,'2020-01-25'), (-4,'2020-01-29'), (2000,'2020-03-10'), (-75,'2020-03-12'),
        (-20,'2020-03-15'), (40,'2020-03-15'), (-50,'2020-3-17'), (200,'2020-10-10'),
        (-200,'2020-10-10')
Select * from transactions
```

amount	date
1000	2020-01-06
-10	2020-01-14
-75	2020-01-20
-5	2020-01-25
-4	2020-01-29
2000	2020-03-10
-75	2020-03-12
-20	2020-03-15
40	2020-03-15
-50	2020-03-17
200	2020-10-10
-200	2020-10-10

```
Select sum (t1.balance) - sum (t2.balance) as total_balance from
(Select 1 as id, sum (amount) as balance from transactions) as t1
Join
(Select 1 as id, count (`date`)*11 as balance from transactions where month (`date`) = 03) as t2
On t1.id = t2.id
```

id	balance
1	2801

id	balance
1	55

total_balance
2746

TASK – 3(2nd question)

```
Create table transactions1 (
amount int not null,
`date` date not null)
Insert transactions1 values (1,'2020-06-29'), (35,'2020-02-20'), (-50,'2020-02-03'),
        (-1,'2020-02-26'), (-200,'2020-08-01'), (-44,'2020-02-07'), (-5,'2020-02-25'),
        (1,'2020-06-29'), (1,'2020-06-29'), (-100,'2020-12-29'), (-100,'2020-12-30'),
        (-100,'2020-12-31')
Select * from transactions1
```

amount	date
1	2020-06-29
35	2020-02-20
-50	2020-02-03
-1	2020-02-26
-200	2020-08-01
-44	2020-02-07
-5	2020-02-25
1	2020-06-29
1	2020-06-29
-100	2020-12-29
-100	2020-12-30
-100	2020-12-31

```
Select t1.balance - t2.credit_charge as total_balance from

(Select 1 as id, sum (amount) as balance from transactions1) as t1 join

(Select 1 as id, count (`date`)*10 as credit_charge from (select * from transactions1 limit 4, 5) as tt) as t2

On t1.id = t2.id
```

id	balance
1	-562

id	credit_charge
1	50

total_balance
-612

TASK – 3(3rd question)

```
Create table transactions2 (

amount int not null,

`date` date not null)

Insert transactions2 values (6000,'2020-04-03'), (5000,'2020-04-02'),

                            (4000,'2020-04-01'), (3000,'2020-03-01'),

                            (2000,'2020-02-01'), (1000,'2020-01-01')

 Select * from transactions2
```

amount	date
6000	2020-04-03
5000	2020-04-02
4000	2020-04-01
3000	2020-03-01
2000	2020-02-01
1000	2020-01-01

```
Select t1.balance - t2.credit_charge as total_balance from

(Select 1 as id, sum (amount) as balance from transactions2) as t1 join

(Select 1 as id, count (`date`)*10 as credit_charge from (select * from transactions2) as tt) as t2

On t1.id = t2.id
```

id	balance
1	21000

id	credit_charge
1	60

total_balance
20940