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
٠	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

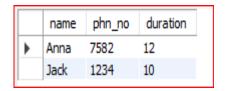
insert calls values(25,1234,7582,8),(7,9999,7582,1),(18,9999,3333,4),(2,7582,3333,3),(3,3333,1234,1),(21,3333,1234,1)

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 Anna Jack

TASK – 2(2nd question)

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)

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

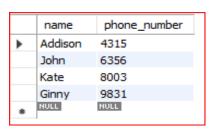
Select callee as phn_no, sum (duration) as duration from calls1 group by callee)

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





id

65

100

145

NULL

caller

8003

9831

4315

NULL

callee

9831

8003

9831

NULL

duration

7

3

18 NULL

TASK – 3

Create table transactions (

amount int not null,

'date' date not null)

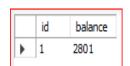
Insert transactions values (1000,'2020-01-06'), (-10,'2020-01-14'), (-75,'2020-01-20'),

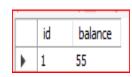
(-5, '2020-01-25'), (-4, '2020-01-29'), (2000, '2020-03-10'), (-75, '2020-03-12'),

(-20, 2020-03-15'), (40, 2020-03-15'), (-50, 2020-3-17'), (200, 2020-10-10'),

(-200, '2020-10-10')

Select * from transactions





amount

1000

-10

-75

-5 -4

2000 -75

-20

40

-50

200 -200 date

2020-01-06

2020-01-14

2020-01-20

2020-01-25

2020-01-29

2020-03-10

2020-03-12

2020-03-15

2020-03-15

2020-03-17

2020-10-10

2020-10-10

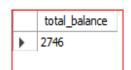
(Select 1 as id, sum (amount) as balance from transactions) as t1

Select sum (t1.balance) - sum (t2.balance) as total balance from

(Select 1 as id, count ('date')*11 as balance from transactions where month ('date') = 03) as t2

On t1.id = t2.id

Join



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')

	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 * from transactions2

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

