SQL ASSIGNMENT

TASK 1

```
create database Assignment;

use Assignment;


create table shopping_history (

product varchar not null,

quantity integer not null,

unit_price integer not null);


insert into shopping_history values ('peanut butter',28,25);

insert into shopping_history values ('peanut butter',35,20);

insert into shopping_history values ('peanut butter',40,35);

insert into shopping_history values ('peanut butter',25,20);

insert into shopping_history values ('bread',35,20);

insert into shopping_history values ('bread',30,25);

insert into shopping_history values ('bread',25,38);

insert into shopping_history values ('bread',28,28);

insert into shopping_history values ('milk',50,20);

insert into shopping_history values ('milk',20,22);

insert into shopping_history values ('milk',32,25);
```

```
insert into shopping_history values ('milk',40,37);

insert into shopping_history values ('curd',10,15);

insert into shopping_history values ('curd',15,20);

insert into shopping_history values ('curd',12,18);

insert into shopping_history values ('curd',18,14);


select * from shopping_history;


select product, sum(quantity * unit_price) as total_price from shopping_history group by product;
```

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task 2 : Q1

```
create table phones(name varchar(20) not null unique,

phone_number integer not null unique);


 create table calls(id integer not null,

caller integer not null,

callee integer not null,

duration integer not null,

unique(id));
```

```
 insert into phones(name,phone_number) values ('jack',1234),
('lene',3333),
('mark',9999),
('anne',7582);
 select * from phones;

insert into calls (id,caller,callee,duration) 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_time as(
select caller as phone_number , sum (duration) as duration from calls group by caller
union all
select callee as phone_number , sum (duration) as duration from calls group by callee)
select name
from phones p join call_time ct on ct.phone_number =p.phone_number
group by name
having sum(duration)>=10
```

order by name ;

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task 2 : Q2

```
create or replace table phones (name varchar(20) not null unique,

phone_number integer not null);


create or replace table calls(id integer not null,

caller integer not null,

callee integer not null,

duration integer not null,

unique(id));


insert into phones (name,phone_number) values ('john',6356),

('addison',4315),

('kate',8003),

('ginny',9831);


 select * from phones;


insert into calls (id,caller,callee,duration) values(65,8003,9831,7),
```

```
(100,9831,8003,3),

(145,4315,9831,18);


 select * from calls;


with call_time as(

select caller as phone_number, sum(duration) as duration from calls group by caller

union all

select callee as phone_number , sum(duration) as duration from calls group by callee)

select p.name from phones p join call_time as ct on p.phone_number = ct.phone_number

group by name

having sum(duration ) >=10

order by name;
```

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Task 3: Q1

```
create or replace table transactions (

amount integer not null ,

date date not null);


insert into transactions (amount ,date ) values (1000,'2020-01-06'),
```

(-10,'2020-01-14'),

(-75,'2020-01-20'),

(-5,'2020-01-25'),

(-4,'2020-01-29'),

(2000,'2020-03-12'),

(-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 *  from transactions ;

select sum(amount) - 55 as balance from transactions ;
```

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TASK 3 :Q2

```
create or replace table transactions(amount integer not null,

date date not null);

 select * from transactions;


insert into transactions (amount , date ) 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 transactions;

 select sum(amount) - 10 * 5 as balance from transactions ;
```

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TASK 3 :Q3

```
create or replace table transactions (

amount integer not null,

date date not null);



select * from transactions ;
```

```
insert into transactions (amount , date ) 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 transactions;


select sum(amount) -12*5 as balance from transactions;
```