

## 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;
```

## **SQL ASSIGNMENT**

### **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 ;
```

## SQL ASSIGNMENT

### 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;
```

## SQL ASSIGNMENT

### 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 ;
```

## **SQL ASSIGNMENT**

### **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 ;
```

### **SQL ASSIGNMENT**

#### **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;
```