**TASK 1**

create database Assigment;

use Assigment;

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;

**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 ;

**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;

**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 ;

**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 ;

**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;