Assignment 1

Task1;

create database db\_shopping\_history;

use db\_shopping\_history;

create or replace table shopping\_history(

product varchar(30) not null,

quantity integer not null,

unit\_price integer not null);

insert into shopping\_history values('milk', 3,10),

('bread',7,3),

('bread', 5, 2);

select \* from shopping\_history;

select product , sum(quantity\*unit\_price) as total\_price from shopping\_history group by product;

Task2;

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));

select \* from calls;

truncate phones;

insert into phones values ('jack',1234),

('Leena',3333),

('Mark',9999),

('Anna',7582);

select \* from phones;

insert into 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;

select name, sum(duration) from phones join calls on phones.phone\_number = calls.caller group by name;

select name, sum(duration) from phones join calls on phones.phone\_number = calls.callee group by name;

create table caller (Name1 varchar(50), Call\_Duration int);

create table callee(Name2 varchar(50), Call\_Duration int);

insert into caller select name, sum(duration) from phones join calls on phones.phone\_number = calls.caller group by name;

insert into callee select name, sum(duration) from phones join calls on phones.phone\_number = calls.callee group by name;

select \* from caller;

select \* from callee;

select \* from caller union select \* from callee;

select name from (select name1 as name , sum(call\_duration) as total\_duration from (select \* from caller union select \* from callee)

as result group by

name having total\_duration>=10 order by name) as results ;

Task 3

Task-3(1):

Create table transactions (

amount int not null,

`date` date not null);

Insert into 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;

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

Task 3(2);

Create table transactions1 (

amount int not null,

`date` date not null);

Insert into 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;

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;

Task 3(3):

Create table transactions2 (

amount int not null,

`date` date not null) ;

Insert into 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;

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;