**Q.1 CODE**

create table shopping\_history (product varchar(80) not null , quantity int not null , unit\_price int not null);

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

insert into shopping\_history values('bread',2,20);

insert into shopping\_history values('milk',5,30);

insert into shopping\_history values('Ghee',3,100);

insert into shopping\_history values('Curd',4,25);

insert into shopping\_history values('Ghee',4,150);

insert into shopping\_history values('Egg',3,30);

insert into shopping\_history values('Curd',9,20);

insert into shopping\_history values('Egg',4,10);

select \* from shopping\_history;

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

**Q.2 CODE – Part1**

create table phones ( name varchar(20) unique , phone\_number int primary key);

insert into phones values ('Jack' , 1234);

insert into phones values ('Lena' , 3333);

insert into phones values ('Mark' , 9999);

insert into phones values ('Anna' , 7582);

create table calls ( id int primary key , caller int , callee int , duration int );

insert into calls values(25,1234,7582,8);

insert into calls values(7,9999,7582,1);

insert into calls values(18,9999,3333,4);

insert into calls values(2,7582,3333,3);

insert into calls values(3,3333,1234,1);

insert into calls values(21,3333,1234,1);

Select x.name from (select a.name, a.phone\_number,

(ifnull(caller\_duration,0) + ifnull(c.callee\_duration,0)) as total\_duration

From phones a

Left join

(Select caller, sum(duration) as caller\_duration from calls group by caller ) b

on a.phone\_number = b.caller

Left join

(Select callee, sum(duration) as callee\_duration from calls group by callee ) c

on a.phone\_number = c.callee

) x

where x.total\_duration>=10

order by x.name ;

**Q.2 PART-2**

**create table phoness ( name varchar(20) unique , phone\_number int primary key);**

**insert into phoness values ('Jhon' , 6356);**

**insert into phoness values ('Adisson' , 4315);**

**insert into phoness values ('Kate' , 8003);**

**insert into phoness values ('Ginny' ,9831);**

**create table callss ( idd int , caller int , callee int , duration int );**

**insert into callss values(65,8003,9831,7);**

**insert into callss values(100,9831,8003,3);**

**insert into callss values(145,4315,9831,18);**

**select x.name from (select p.name ,p.phone\_number, (ifnull(a.callee\_duration,0) + ifnull(b.caller\_duration,0)) as total\_duration from phoness p**

**left join**

**(select callee , sum(duration) as callee\_duration from callss group by callee ) a**

**on p.phone\_number = a.callee**

**left join**

**(select caller , sum(duration) as caller\_duration from callss group by caller ) b**

**on p.phone\_number = b.caller ) x**

**where x.total\_duration>=10 order by x.name;**

**Q.3 CODE – PART1**

**Create table transactions(amount int not null ,dates date not null);**

**insert into transactions values(1000, '2020-01-05');**

**insert into transactions values(-10, '2020-01-14');**

**insert into transactions values(-75,'2020-01-20');**

**insert into transactions values(-5,'2020-01-25');**

**insert into transactions values(-4,'2020-01-29');**

**insert into transactions values(2000,'2020-03-10');**

**insert into transactions values(-75,'2020-03-12');**

**insert into transactions values(-20,'2020-03-15');**

**insert into transactions values(40,'2020-03-15');**

**insert into transactions values(-50,'2020-03-17');**

**insert into transactions values(200,'2020-10-10');**

**insert into transactions values(-200,'2020-10-10');**

**select (sum(a.monthly\_transaction)+ b.debit\_card\_fine ) as account\_balance from**

**(select sum(amount) as monthly\_transaction , monthname(dates) as month\_name from transactions group by month\_name) a ,**

**(select (-5\*(12-count(month\_name))) as debit\_card\_fine from**

**(select count(amount) as monthly\_credit\_transactions, sum(amount) as credit\_card\_transaction\_amount ,**

**monthname(dates) as month\_name from transactions where amount<0 group by month\_name) x**

**where x.monthly\_credit\_transactions>=3 and x.credit\_card\_transaction\_amount<=-100) b ;**

**Q.3 PART-2**

**Create table transactions(amount int not null ,dates date not null);**

**insert into transactions values(1, '2020-06-29');**

**insert into transactions values(35, '2020-02-20');**

**insert into transactions values(-50,'2020-02-03');**

**insert into transactions values(-1,'2020-02-26');**

**insert into transactions values(-200,'2020-08-01');**

**insert into transactions values(-44,'2020-02-07');**

**insert into transactions values(-5,'2020-02-25');**

**insert into transactions values(1,'2020-06-29');**

**insert into transactions values(1,'2020-06-29');**

**insert into transactions values(-100,'2020-12-29');**

**insert into transactions values(-100,'2020-12-30');**

**insert into transactions values(-100,'2020-12-31');**

**drop table transactions;**

**select (sum(a.monthly\_transaction)+ b.debit\_card\_fine ) as account\_balance from**

**(select sum(amount) as monthly\_transaction , monthname(dates) as month\_name from transactions group by month\_name) a ,**

**(select (-5\*(12-count(month\_name))) as debit\_card\_fine from**

**(select count(amount) as monthly\_credit\_transactions, sum(amount) as credit\_card\_transaction\_amount ,**

**monthname(dates) as month\_name from transactions where amount<0 group by month\_name) x**

**where x.monthly\_credit\_transactions>=3 and x.credit\_card\_transaction\_amount<=-100) b ;**

**Q3. PART-3**

**Create table transactions(amount int not null ,dates date not null);**

**insert into transactions values(6000, '2020-04-03');**

**insert into transactions values(5000, '2020-04-02');**

**insert into transactions values(4000,'2020-04-01');**

**insert into transactions values(3000,'2020-03-01');**

**insert into transactions values(2000,'2020-02-01');**

**insert into transactions values(1000,'2020-01-01');**

**select (sum(a.monthly\_transaction)+ b.debit\_card\_fine ) as account\_balance from**

**(select sum(amount) as monthly\_transaction , monthname(dates) as month\_name from transactions group by month\_name) a ,**

**(select (-5\*(12-count(month\_name))) as debit\_card\_fine from**

**(select count(amount) as monthly\_credit\_transactions, sum(amount) as credit\_card\_transaction\_amount ,**

**monthname(dates) as month\_name from transactions where amount<0 group by month\_name) x**

**where x.monthly\_credit\_transactions>=3 and x.credit\_card\_transaction\_amount<=-100) b ;**