CREATE DATABASE KN\_ASS\_DATABASE;

USE KN\_ASS\_DATABASE;

--------------Task-1---------------------

CREATE or Replace TABLE shopping\_history

(

product varchar(30) not null,

quantity int not null,

unit\_price int not null

);

select \* from shopping\_history;

INSERT INTO shopping\_history VALUES('milk',3,10);

INSERT INTO shopping\_history VALUES('bread',7,3);

INSERT INTO shopping\_history VALUES('bread',5,2);

INSERT INTO shopping\_history VALUES('curd',4,15);

INSERT INTO shopping\_history VALUES('ghee',6,25);

INSERT INTO shopping\_history VALUES('milk',8,14);

INSERT INTO shopping\_history VALUES('cheese',5,30);

INSERT INTO shopping\_history VALUES('curd',2,20);

INSERT INTO shopping\_history VALUES('ghee',3,35);

INSERT INTO shopping\_history VALUES('bread',9,5);

with p1 as (

select product,quantity,unit\_price,(quantity \* unit\_price) as t1

from shopping\_history

)

select product,sum(t1) as total\_price from p1

group by 1

order by 1 desc

------------------Task-2--------------------

CREATE or Replace TABLE phones

(

name varchar(20) not null unique,

phone\_number int not null unique

);

CREATE or Replace TABLE calls

(

id int not null,

caller int not null,

callee int not null,

duration int not null,

unique(id)

);

INSERT INTO phones VALUES('Jack',1234);

INSERT INTO phones VALUES('Lena',3333);

INSERT INTO phones VALUES('Mark',9999);

INSERT INTO phones VALUES('Anna',7582);

select \* from phones

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);

CREATE TABLE CALLERS AS

SELECT CALLER,DURATION FROM "KN\_ASS\_DATABASE"."PUBLIC"."CALLS"

CREATE TABLE CALLEES AS

SELECT CALLEE,DURATION FROM "KN\_ASS\_DATABASE"."PUBLIC"."CALLS"

SELECT DISTINCT NAME FROM (

SELECT DISTINCT NAME,SUM(DURATION) OVER (PARTITION BY CALLEE) AS C1

FROM "KN\_ASS\_DATABASE"."PUBLIC"."PHONES" AS A

LEFT JOIN "KN\_ASS\_DATABASE"."PUBLIC"."CALLEES" AS B

ON A.phone\_number=B.callee

UNION ALL

SELECT DISTINCT NAME,SUM(DURATION) OVER (PARTITION BY CALLER) AS C1

FROM "KN\_ASS\_DATABASE"."PUBLIC"."PHONES" AS A

LEFT JOIN "KN\_ASS\_DATABASE"."PUBLIC"."CALLERS" AS C

ON A.phone\_number=C.caller) GROUP BY NAME HAVING SUM(C1)>=10;

-------------------Task-3-----------------------

create table transactions(

amount integer not null,

Date DATE not null

)

insert into transactions(amount,Date) Values (1000,'2020-01-06');

insert into transactions(amount,Date) Values(-10,'2020-01-14');

insert into transactions(amount,Date) Values(-75,'2020-01-20');

insert into transactions(amount,Date) Values(-5,'2020-01-25');

insert into transactions(amount,Date) Values(-4,'2020-01-29');

insert into transactions(amount,Date) Values(2000,'2020-03-10');

insert into transactions(amount,Date) Values(-75,'2020-03-12');

insert into transactions(amount,Date) Values(-20,'2020-03-15');

insert into transactions(amount,Date) Values(40,'2020-03-15');

insert into transactions(amount,Date) Values(-50,'2020-03-17');

insert into transactions(amount,Date) Values(200,'2020-10-10');

insert into transactions(amount,Date) Values(-200,'2020-10-10');

select \* from "KN\_ASS\_DATABASE"."PUBLIC"."TRANSACTIONS"

SELECT SUM(FINAL\_AMOUNT) FROM (

SELECT AMOUNT AS FINAL\_AMOUNT FROM "KN\_ASS\_DATABASE"."PUBLIC"."TRANSACTIONS" WHERE AMOUNT>0

UNION ALL

SELECT SUM(AMOUNT)-(12-COUNT(MONT))\*5 AS FINAL\_AMOUNT FROM

(

SELECT

CASE

WHEN C>=3 AND NEGATIVE\_AMOUNT<=-100 THEN NEGATIVE\_AMOUNT

ELSE NEGATIVE\_AMOUNT-5 END AS AMOUNT,

MONT

FROM (

SELECT SUM(AMOUNT) AS NEGATIVE\_AMOUNT,COUNT(\*) AS C,MONT FROM (

SELECT DISTINCT AMOUNT,DATE,EXTRACT(MONTH FROM Date) AS MONT

FROM "KN\_ASS\_DATABASE"."PUBLIC"."TRANSACTIONS") WHERE AMOUNT<0

GROUP BY MONT )));