CREATE DATABASE MYTEST;

USE MYTEST;

--TASK1

CREATE OR REPLACE TABLE "SHOPPING\_HISTORY"

(

PRODUCT VARCHAR(50) NOT NULL,

QUANTITY INT NOT NULL ,

UNIT\_PRICE INT NOT NULL

);

INSERT INTO SHOPPING\_HISTORY VALUES ('MILK',3,10),

('BREAD',2,7),

('CHEES',3,20),

('COOKIES',2,15),

('BUTTER',4,35),

('CHEES',6,20),

('MILK',5,10),

('BREAD',1,7),

('BUTTER',8,35),

('MILK',6,10);

SELECT \* FROM SHOPPING\_HISTORY;

--TOTAL AMOUNT OF MONEY SPENT

SELECT PRODUCT, SUM(TOTAL) AS TOTAL\_VALUE FROM (SELECT \* ,QUANTITY\*UNIT\_PRICE AS TOTAL FROM SHOPPING\_HISTORY)

GROUP BY PRODUCT

ORDER BY PRODUCT DESC ;

--TASK2

CREATE OR REPLACE TABLE PHONES(

NAME VARCHAR(20) NOT NULL UNIQUE,

PHONE\_NUMBER INT NOT NULL UNIQUE

);

CREATE TABLE CALLS(

ID INT NOT NULL UNIQUE,

CALLER INT NOT NULL,

CALLEE INT NOT NULL,

DURATION INT NOT NULL

);

INSERT INTO PHONES VALUES('JHON',6356),

('ADDISON',4315),

('KATE',8003),

('GINNY',9831);

SELECT \* FROM PHONES;

INSERT INTO CALLS VALUES(65,8003,9831,7),

(100,9831,8003,3),

(145,4315,9831,18);

SELECT \* FROM CALLS;

--CLIENT TALK ATLEAST 10 MINS

SELECT NAME

FROM PHONES P JOIN CALLS C ON P.PHONE\_NUMBER=C.CALLER

UNION

SELECT NAME

FROM PHONES P JOIN CALLS C ON P.PHONE\_NUMBER=C.CALLEE

GROUP BY 1

HAVING SUM(DURATION)>10;

--TASK 3

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,'2020-03-17'),

(200,'2020-10-10'),

(-200,'2020-10-10');

SELECT \* FROM TRANSACTIONS;

-- BALANCE

WITH TRNX AS(

SELECT MONTH(DATE) AS MONTH FROM TRANSACTIONS WHERE AMOUNT LIKE '-%'

GROUP BY 1

HAVING SUM(AMOUNT)<=-100 AND COUNT(MONTH)>=3)

SELECT (SELECT SUM(AMOUNT)FROM TRANSACTIONS)-(12-COUNT(MONTH)\*5) AS FINAL\_BALANCE FROM TRNX ;