## 13. Taldea 2. Laborategiaren Txostena

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OHARRA: CopyPaste egiten bada Ubuntu Terminalean kontuz komillak desberdin agertzen direlako Terminalean. Aldatu behar dira komanduak ondo exekutatzeko.

### **DBCOIN**

CREATE DATABASE DBcoin;

CREATE USER admDBCOIN IDENTIFIED BY 'igor2020';

GRANT RELOAD ON \*.\* TO admDBCOIN; # Hau da flush privileges egin ahal izateko.

#### 1) "Transfer" izeneko taula sortu (gako arrotzak definitu barik).

# HASIERAN ADM EZ DU TAULA SORTZEKO BAIMENIK BERAZ EMATEN DIOGU: ROOT > GRANT CREATE ON \*.\* TO admDBCOIN;

admDBOCOIN >

CREATE TABLE TRANSFER(TID INTEGER NOT NULL AUTO\_INCREMENT, TDATE DATE, TSENDER INTEGER NOT NULL, TRECEIVER INTEGER NOT NULL, TCOIN INTEGER NOT NULL, PRIMARY KEY(TID));

#### 2) "Owner" eta "Coin" izeneko taulak sortu.

admDBCOIN >

CREATE TABLE OWNER(OID INTEGER NOT NULL AUTO\_INCREMENT, ONAME VARCHAR(20) NOT NULL, OEMAIL VARCHAR(20), BALANCE INTEGER, PRIMARY KEY(OID));

ROOT >

GRANT REFERENCES ON DBcoin.OWNER TO admDBCOIN;

ADM --> CREATE TABLE COIN(CID INTEGER NOT NULL AUTO\_INCREMENT, COWNER INTEGER NOT NULL, CUNITS INTEGER NOT NULL, CVALUE INTEGER, PRIMARY KEY(CID), FOREIGN KEY(COWNER) REFERENCES OWNER(OID));

#### 3) "Transfer" izeneko taularen gako arrotzak sortu.

ROOT >

GRANT ALTER ON DBcoin.TRANSFER TO admDBCOIN; GRANT SELECT(OID) ON DBcoin.OWNER TO admDBCOIN; GRANT SELECT(CID) ON DBcoin.COIN TO admDBCOIN;

admDBCOIN >

ALTER TABLE TRANSFER ADD FOREIGN KEY (TSENDER) REFERENCES OWNER(OID); ALTER TABLE TRANSFER ADD FOREIGN KEY (TRECEIVER) REFERENCES OWNER(OID); ALTER TABLE TRANSFER ADD FOREIGN KEY (TCOIN) REFERENCES COIN(CID);

#### 4) "Rippler" izena duen jabe bat sartu "Owner" izeneko taulan.

ROOT >

GRANT INSERT (ONAME) ON DBcoin.OWNER TO admDBCOIN;

admDBCOIN >

INSERT INTO OWNER(ONAME) VALUES ("RIPPLER");

5) "Ethereum" izena duen beste bezero bat sartu "Owner" izeneko taulan.

admDBCOIN >

INSERT INTO OWNER(ONAME) VALUES ("ETHEREUM");

6) "Rippler" jabeko txanpon berri bat sartu "Coin" izeneko taulan.

ROOT >

GRANT INSERT ON DBcoin.COIN TO admDBCOIN;

admDBCOIN >

INSERT INTO COIN(COWNER, CUNITS) VALUES (1, 1); # 1 DA RIPPLER JABEAREN ID.

7) "Ethereum" jabeko beste txanpon berri bat sartu "Coin" izeneko taulan.

admDBCOIN >

INSERT INTO COIN(COWNER, CUNITS) VALUES(2, 1); # 2 DA ETHEREUM JABEAREN ID.

8) "Transfer" taulan 2021eko otsailaren 1ean egindako 1. txanponaren (6. urratsean sortutakoa)

transferentzia berri bat sartu non "Ethereum" igorlea eta "Ripple" hartzailea diren.

ROOT >

GRANT SELECT FROM DBCOIN.COIN TO admDBCOIN;

GRANT INSERT (TSENDER, TRECEIVER, TCOIN, TDATE) ON DBcoin.TRANSFER TO admDBCOIN;

admDBCOIN > INSERT INTO TRANSFER(TSENDER, TRECEIVER, TCOIN, TDATE) VALUES(2, 1, 1, '2021-02-01');

9) "Transfer" taulan 2021eko otsailaren 2an egindako 2. txanponaren (7. urratsean sortutakoa) transferentzia berri bat sartu non "Ripple" igorlea eta "Ethereum" hartzailea diren.

admDBCOIN > INSERT INTO TRANSFER(TSENDER, TRECEIVER, TCOIN, TDATE) VALUES(1, 2, 2, '2021-02-02');

10) Aurreko urratsean gordetako transferentziaren data aldatu 2021eko otsailaren 3 baliora.

ROOT >
GRANT UPDATE(TDATE) ON DBcoin.TRANSFER TO admDBCOIN;
GRANT SELECT(TDATE) ON DBcoin.TRANSFER TO admDBCOIN;
admDBCOIN >

UPDATE TRANSFER SET TDATE = '2021-02-03' WHERE TDATE = '2021-02-02';

11) "MIser1" eta "MIser2" izeneko MySQL erabiltzaileak sortu.

ROOT >
GRANT CREATE USER ON \*.\* TO admDBCOIN;
admDBCOIN >
CREATE USER MIser1 IDENTIFIED BY 'miser12020';
CREATE USER MIser2 IDENTIFIED BY 'miser22020';

12) Laborategian emandako orrian deskribatzen diren baimenak esleitu.

# GURE TALDEA 13. TALDEA DA, ETA HAUEK DIRA EMANDAKO BAIMENAK:

#### **MISER1 ERABILTZAILEARI EMANDAKO BAIMENAK**

#### **OWNER TAULAN:**

ROOT >

GRANT SELECT(OID, OEMAIL) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(OID, OEMAIL) ON DBcoin.OWNER TO MIser1;

ROOT>

GRANT INSERT (ONAME, OEMAIL, OBALANCE) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT INSERT(ONAME, OEMAIL, OBALANCE) ON DBcoin.OWNER TO MIser1;

ROOT >

GRANT UPDATE(OID, ONAME, OBALANCE) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT UPDATE(OID, ONAME, OBALANCE) ON DBcoin.OWNER TO MIser1;

#### **TRANSFER TAULAN:**

ROOT >

GRANT SELECT(TID, TRECEIVER, TCOIN, TDATE) ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(TID, TRECEIVER, TCOIN, TDATE) ON DBcoin.TRANSFER TO MIser1;

ROOT >

GRANT INSERT ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT INSERT ON DBcoin.TRANSFER TO MIser1;

ROOT >

GRANT UPDATE ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT UPDATE ON DBcoin.TRANSFER TO MIser1;

#### **COIN TAULAN:**

ROOT >

GRANT SELECT(COWNER, CUNITS, CVALUE) ON DBcoin.COIN TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(COWNER, CUNITS, CVALUE) ON DBcoin.COIN TO MIser1;

ROOT >

GRANT INSERT(CID, COWNER, CVALUE) ON DBcoin.COIN TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT INSERT(CID, COWNER, CVALUE) ON DBcoin.COIN TO MIser1;

ROOT >

GRANT UPDATE ON DBcoin.COIN TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT UPDATE ON DBcoin.COIN TO MIser1;

#### Balantze negatiboa duten jabeen identifikatzailea eta izena lortu.

ROOT >

GRANT CREATE VIEW ON \*.\* TO admDBCOIN WITH GRANT OPTION; GRANT SELECT(ONAME, OID, OBALANCE) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT CREATE VIEW ON \*.\* TO MIser1;

GRANT SELECT(ONAME, OID, OBALANCE) ON DBcoin.OWNER TO MIser1;

Mlser1 >

CREATE VIEW DBcoin.NEGATIBOAKLORTU(OWNERNAME, ID) AS SELECT OID, ONAME FROM OWNER WHERE OBALANCE < 0;

#### Jabeen identifikatzailea eta korreoa kontsultatu.

ROOT >

GRANT SELECT(OID, OEMAIL) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(OID, OEMAIL) ON DBcoin.OWNER TO MIser1;

MIser1 >

CREATE VIEW DBcoin. JABEAKKONTSULTATU AS SELECT OID, OEMAIL FROM OWNER;

# Jabeen balantzea eguneratu bere balioa %10 bat gehienez aldatuz eta identifikatzailea adieraziz.

Delimiter//

create procedure DBcoin.eguneratu(IN pertzentaia double,IN id int) begin update DBcoin.Owner set oBalance=oBalance\*pertzentaia where oid=id and pertzentaia <1.10 and pertzentaia >0.9

end//

delimiter;

#### Jabe baten balantzea eguneratu identifikatzailea adieraziz

Delimiter//

create procedure DBcoin.eguneratu2(IN balance int,IN id int) begin update DBcoin.Owner set oBalance=balance where oid=id end// delimiter;

#### MISER2 ERABILTZAILEARI EMANDAKO BAIMENAK

#### **OWNER TAULAN:**

ROOT >

GRANT SELECT(OID, OEMAIL) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(OID, OEMAIL) ON DBcoin.OWNER TO MIser2;

ROOT >

GRANT INSERT(OID, ONAME, OEMAIL) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT INSERT(OID, ONAME, OEMAIL) ON DBcoin.OWNER TO MIser2;

ROOT >

GRANT UPDATE (ONAME, OEMAIL, OBALANCE) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION:

admDBCOIN >

GRANT UPDATE (ONAME, OEMAIL, OBALANCE) ON DBcoin.OWNER TO MIser2;

#### **TRANSFER TAULAN:**

ROOT >

GRANT SELECT ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT ON DBcoin.TRANSFER TO Mlser2;

ROOT >

GRANT INSERT (TRECEIVER, TCOIN, TDATE) ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT INSERT (TRECEIVER, TCOIN, TDATE) ON DBcoin.TRANSFER TO MIser2;

ROOT >

GRANT UPDATE(TID, TSENDER, TRECEIVER) ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT UPDATE(TID, TSENDER, TRECEIVER) ON DBcoin.TRANSFER TO MIser2;

#### **COIN TAULAN:**

ROOT >

GRANT SELECT(CID, CUNITS, CVALUE) ON DBcoin.COIN TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(CID, CUNITS, CVALUE) ON DBcoin.COIN TO MIser2;

ROOT >

GRANT INSERT(COWNER, CUNITS) ON DBcoin.COIN TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT INSERT(COWNER, CUNITS) ON DBcoin.COIN TO MIser2;

ROOT >

GRANT UPDATE(CID, COWNER, CVALUE) ON DBcoin.COIN TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT UPDATE(CID, COWNER, CVALUE) ON DBcoin.COIN TO MIser2;

#### Tansferentzien identifikatzailea eta data kontsultatu.

ROOT >

GRANT SELECT(TID, TDATE) ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION; GRANT CREATE VIEW ON \*.\* TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >
GRANT SELECT(TID, TDATE) ON DBcoin.TRANSFER TO MIser2;
GRANT CREATE VIEW ON \*.\* TO MIser2;

MIser2 >

CREATE VIEW DBcoin.TRANSFERENTZIAKKONTSULTATU AS SELECT TID, TDATE FROM TRANSFER;

# Igorleek balantze negatiboa duten transferentzien identifikatzailea eta data kontsultatu.

ROOT >

GRANT SELECT(OBALANCE) ON DBcoin.OWNER TO admDBCOIN WITH GRANT OPTION; GRANT SELECT(TSENDER) ON DBcoin.TRANSFER TO admDBCOIN WITH GRANT OPTION;

admDBCOIN >

GRANT SELECT(OBALANCE) ON DBcoin.OWNER TO MIser2; GRANT SELECT(TSENDER) ON DBcoin.TRANSFER TO MIser2;

MIser2 >

CREATE VIEW DBcoin.BALANTZENEGATIBOIGORLEAK AS SELECT TID, TDATE FROM TRANSFER WHERE

## **DBET**

#### # HASI AURRETIK

ROOT >

CREATE USER admDBET IDENTIFIED BY 'martin2020';

GRANT CREATE ON \*.\* TO admDBET;

GRANT RELOAD ON \*.\* TO admDBCOIN; # Hau da flush privileges egin ahal izateko.

admDBET

CREATE DATABASE DBet;

USE DBet;

#### 1."Bet" izeneko taula sortu (gako arrotzak definitu barik).

admDBET >

CREATE TABLE BET(BID INTEGER NOT NULL AUTO\_INCREMENT, BGAMBLER INTEGER NOT NULL, BEVENT INTEGER NOT NULL, BAMOUNT INTEGER, BRESULT VARCHAR(20), PRIMARY KEY(BID));

#### 2."Gambler" eta "Event" izeneko taulak sortu.

admDBET >

CREATE TABLE GAMBLER(GID INTEGER NOT NULL AUTO\_INCREMENT, GNAME VARCHAR(20) NOT NULL, GEMAIL VARCHAR(20), GCREDIT INTEGER, PRIMARY KEY(GID));

CREATE TABLE EVENT(EID INTEGER NOT NULL AUTO\_INCREMENT, ENAME VARCHAR(20) NOT NULL, EDATE DATE, ERESULT VARCHAR(20), PRIMARY KEY(EID));

#### 3."Bet" izeneko taularen gako arrotzak sortu.

ROOT >

GRANT ALTER ON DBet.BET TO admDBET; GRANT REFERENCES ON DBet.GAMBLER TO admDBET; GRANT REFERENCES ON DBet.EVENT TO admDBET;

admDBET >

ALTER TABLE BET ADD FOREIGN KEY(BGAMBLER) REFERENCES GAMBLER(GID); ALTER TABLE BET ADD FOREIGN KEY(BEVENT) REFERENCES EVENT(EID);

## 4."MacBeth" izena duen apustulari bat sartu "Gambler" izeneko taulan. ROOT > GRANT INSERT(GNAME) ON DBet.GAMBLER TO admDBET; admDBET > INSERT INTO GAMBLER(GNAME) VALUES('MacBeth'); 5."Betty" izena duen beste apustulari bat sartu "Gambler" izeneko taulan. admDBET > INSERT INTO GAMBLER(GNAME) VALUES('Betty'); 6.2021eko otsailaren 1ean ospatuko den eta "SnailRace" izena duen ekitaldi berri bat sartu "Event" izeneko taulan. ROOT > GRANT INSERT(ENAME) ON DBet.EVENT TO admDBET; admDBET > INSERT INTO EVENT(ENAME) VALUES('SnailRace'); 7.2021eko otsailaren 2an ospatuko den eta "CaterpillarFight" izena duen beste ekitaldi berri bat sartu "Event" izeneko taulan. ROOT > GRANT INSERT(ENAME, EDATE) ON DBet.EVENT TO admDBET; admDBET > INSERT INTO EVENT(ENAME, EDATE) VALUES('CaterpillarFight', '2021-02-02'); 8."SnailRace" ekitaldian "MacBeth" apustulariak "Turbo wins" alde egindako apustu berri bat sartu "Bet" izeneko taulan. ROOT > GRANT INSERT(BGAMBLER, BEVENT, BRESULT) ON DBet.BET TO admDBET; admDBET > INSERT INTO BET(BGAMBLER, BEVENT, BRESULT) VALUES(1, 1, 'Turbo Wins');

9."Caterpillar Fight" ekitaldian "Betty" apustulariak "Butterfly loses" alde egindako apustu berri bat sartu "Bet" izeneko taulan.

admDBET > INSERT INTO BET(BGAMBLER, BEVENT, BRESULT) VALUES(2, 2, 'Butterfly Loses');

10."SnailRace" ekitaldiaren data 2021eko otsailaren 3 baliora eguneratu.

ROOT >
GRANT UPDATE(EDATE) ON DBet.EVENT TO admDBET;
GRANT SELECT(EDATE) ON DBet.EVENT TO admDBET;
admDBET >
UPDATE SET EDATE = '2021-02-03' WHERE EDATE = '2021-02-02';

11."LUser1" eta "LUser2" izeneko MySQL erabiltzaileak sortu.

ROOT >
GRANT CREATE USER ON \*.\* TO admDBET;
admDBET >
CREATE USER LUser1 IDENTIFIED BY 'luser12020';
CREATE USER LUser2 IDENTIFIED BY 'luser22020';

12.Laborategian emandako orrian deskribatzen diren baimenak esleitu.

# GURE TALDEA 13. TALDEA DA, ETA HAUEK DIRA EMANDAKO BAIMENAK:

#### **LUSER1 ERABILTZAILEARI EMANDAKO BAIMENAK**

#### **GAMBLER TAULAN:**

ROOT >

GRANT SELECT ON DBet.GAMBLER TO admDBET WITH GRANT OPTION;

admDBET >

GRANT SELECT ON DBet.GAMBLER TO LUser1;

ROOT >

GRANT INSERT(GID, GNAME, GEMAIL) ON DBet.GAMBLER TO admDBET WITH GRANT OPTION;

admDBET >

GRANT INSERT(GID, GNAME, GEMAIL) ON DBet.GAMBLER TO LUSer1;

ROOT>

GRANT UPDATE(GNAME, GEMAIL, GCREDIT) ON DBet.GAMBLER TO admDBET WITH GRANT OPTION;

admDBET >

GRANT UPDATE(GNAME, GEMAIL, GCREDIT) ON DBet.GAMBLER TO LUSer1;

#### **BET TAULAN:**

ROOT >

GRANT SELECT(BID, BEVENT, BAMOUNT, BRESULT) ON DBet.BET TO admDBET WITH GRANT OPTION;

admDBET >

GRANT SELECT(BID, BEVENT, BAMOUNT, BRESULT) ON DBet.BET TO LUser1;

ROOT >

GRANT INSERT(BID, BEVENT, BAMOUNT, BRESULT) ON DBet.BET TO admDBET WITH GRANT OPTION;

admDBET >

GRANT INSERT(BID, BEVENT, BAMOUNT, BRESULT) ON DBet.BET TO LUSer1;

ROOT >

GRANT UPDATE ON DBet.BET TO admDBET WITH GRANT OPTION;

admDBET >

GRANT UPDATE ON DBet.BET TO LUser1;

#### **EVENT TAULAN:**

ROOT >

GRANT SELECT(EID, ENAME, ERESULT) ON DBet.EVENT TO admDBET WITH GRANT OPTION;

admDBET >

GRANT SELECT(EID, ENAME, ERESULT) ON DBet.EVENT TO LUSer1;

ROOT > GRANT INSERT ON DBet.EVENT TO admDBET WITH GRANT OPTION;
admDBET > GRANT INSERT ON DBet.EVENT TO LUser1;
ROOT> GRANT UPDATE(EID, ERESULT) ON DBet.EVENT TO admDBET WITH GRANT OPTION;
admDBET > GRANT UPDATE(EID, ERESULT) ON DBet.EVENT TO LUser1;

#### **LUSER2 ERABILTZAILEARI EMANDAKO BAIMENAK**

#### **GAMBLER TAULAN:**

ROOT >

GRANT SELECT(GID, GNAME, GCREDIT) ON DBet.GAMBLER TO admDBET WITH GRANT OPTION;

admDBET >

GRANT SELECT(GID, GNAME, GCREDIT) ON DBet.GAMBLER TO LUser2;

ROOT >

GRANT INSERT ON DBet.GAMBLER TO admDBET WITH GRANT OPTION;

admDBET >

GRANT INSERT ON DBet.GAMBLER TO LUser2;

ROOT>

GRANT UPDATE(GID, GNAME, GCREDIT) ON DBet.GAMBLER TO admDBET WITH GRANT OPTION;

admDBET > GRANT UPDATE(GID, GNAME, GCREDIT) ON DBet.GAMBLER TO LUSer2; **BET TAULAN:** ROOT > GRANT SELECT ON DBet.BET TO admDBET WITH GRANT OPTION; admDBET > GRANT SELECT ON DBet.BET TO LUser2; ROOT > GRANT INSERT(BID, BGAMBLER, BEVENT) ON DBet.BET TO admDBET WITH GRANT OPTION; admDBET > GRANT INSERT(BID, BGAMBLER, BEVENT) ON DBet.BET TO LUSer2; ROOT > GRANT UPDATE(BID, BAMOUNT) ON DBet.BET TO admDBET WITH GRANT OPTION; admDBET > GRANT UPDATE(BID, BAMOUNT) ON DBet.BET TO LUser2; **EVENT TAULAN:** ROOT > GRANT SELECT(EID, ENAME, EDATE) ON DBet.EVENT TO admDBET WITH GRANT OPTION; admDBET > GRANT SELECT(EID, ENAME, EDATE) ON DBet.EVENT TO LUser2; ROOT > GRANT INSERT(EID, ENAME, EDATE) ON DBet.EVENT TO admDBET WITH GRANT OPTION; admDBET > GRANT INSERT(EID, ENAME, EDATE) ON DBet.EVENT TO LUser2;

GRANT UPDATE ON DBet.EVENT TO admDBET WITH GRANT OPTION;

ROOT>

admDBET > GRANT UPDATE ON DBet.EVENT TO LUser2;

# 2021 urtean apusturen bat egin duten apustularien identifikatzailea eta izena kontsultatu.

CREATE VIEW 2020Transferentziak AS SELECT tld,tSender,tReceiver FROM Transfer WHERE Extract(YEAR from tDate)='2020';