**-- 1st March 2024 Practice 2 assignment**

**SELVA VISWANATH SENTHILKUMAR**

**LVADSUSR113**

-- 4.1 Creating table

DROP SCHEMA IF EXISTS dsailva\_sales;

CREATE SCHEMA dsailva\_sales;

use dsailva\_sales;

SET SQL\_SAFE\_UPDATES = 0;

-- 1

CREATE TABLE dsai\_m\_customer(

customer\_id varchar(20) primary key,

customer\_name varchar(30)

);

-- 2

ALTER TABLE dsai\_m\_customer

ADD email varchar(40),

ADD contact\_number varchar(40);

-- 3

CREATE TABLE dsai\_m\_currency(

currency\_code varchar(5) primary key,

currency\_name varchar(20)

);

-- 4

CREATE TABLE dsai\_m\_product(

product\_id int auto\_increment primary key,

product\_name varchar(30) NOT NULL

);

-- 5

CREATE TABLE dsai\_m\_user(

user\_id char(4) primary key,

username char(15),

last\_login datetime NOT NULL

);

-- 6

-- default: innodb {has commit, rollback, crash-recovery}

CREATE TABLE dsai\_m\_account\_group\_master (

group\_code int primary key,

group\_name varchar(20)

) ENGINE = MyISAM;

-- 7

CREATE TABLE dsai\_d\_customer\_favourite (

customer\_id varchar(20),

product\_id int,

last\_purchase datetime,

foreign key (customer\_id) references dsai\_m\_customer(customer\_id),

foreign key (product\_id) references dsai\_m\_product(product\_id),

primary key (customer\_id, product\_id)

);

-- 8

SHOW tables;

-- 9

DESC dsai\_m\_customer;

-- 4.2 Insert operations

-- 1

INSERT INTO dsai\_m\_customer

VALUES

('IDC000001', "selva vishwanath", "selva.senthilkumar@latentview.com", "888888");

INSERT INTO dsai\_m\_customer

VALUES('IDC000002', "vishwa ", "selva.senthilkumar@latentview.com", "888888");

INSERT INTO dsai\_m\_customer

VALUES('IDC000003', " vishwanath", "selva.senthilkumar@latentview.com", "888888");

INSERT INTO dsai\_m\_customer

VALUES('IDC000004', " vishwanath", "selva.senthilkumar@latentview.com", "888888");

INSERT INTO dsai\_m\_customer

VALUES('IDC000005', " vishwanath", "selva.senthilkumar@latentview.com", "888888");

-- 2

INSERT INTO dsai\_m\_customer

VALUES

('IDC000006', " vishwanath", "selva.senthilkumar@latentview.com", "888888"),

('IDC000007', " vishwanath", "selva.senthilkumar@latentview.com", "888888"),

('IDC000008', " vishwanath", "selva.senthilkumar@latentview.com", "888888"),

('IDC000009', " vishwanath", "selva.senthilkumar@latentview.com", "888888"),

('IDC000010', " vishwanath", "selva.senthilkumar@latentview.com", "888888");

-- 3

insert into dsai\_m\_product(product\_name)

values('dishwasher');

-- 4

insert into dsai\_m\_user

values ("em06", "vishwanathselva",now());

-- 5, 6

CREATE TABLE dsai\_t\_sales(

customer\_id varchar(20),

product\_code int ,

sales\_date date,

sales\_quantity int,

location\_code varchar(20)

);

SHOW VARIABLES LIKE "secure\_file\_priv";

LOAD DATA infile 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/DSAI\_T\_SALES.csv'

into table dsai\_t\_sales

fields terminated by ','

enclosed by '"'

lines terminated by '\n'

IGNORE 1 ROWS

(customer\_id, product\_code, @sales\_date\_v, sales\_quantity, location\_code)

SET sales\_date = STR\_TO\_DATE((@sales\_date\_v), '%d-%m-%Y');

-- 7

ALTER TABLE dsai\_t\_sales

add created\_dt datetime default now(),

add created\_user char(4) default "em06";

-- 8

CREATE TABLE dsai\_m\_customer\_dup as select \* from dsai\_m\_customer;

-- 9

CREATE TABLE dsai\_m\_product\_group(

product\_group\_code varchar(15) primary key,

group\_desc varchar(200)

);

INSERT INTO dsai\_m\_product\_group

VALUES ('PG001','sample product group'),

('PG002','sample product group'),

('PG003','sample product group');

Alter table dsai\_m\_product

add product\_group\_code varchar(20),

add foreign key(product\_group\_code) references dsai\_m\_product\_group(product\_group\_code);

CREATE TABLE dsai\_m\_product\_dup as select product\_id, product\_name from dsai\_m\_product;

-- 10

alter table dsai\_t\_sales

add PRIMARY KEY(customer\_id, product\_code, sales\_date);

-- 11

INSERT INTO dsai\_m\_product

VALUES (2, 'sample', 'PG001'),

(3, 'sample', 'PG002'),

(4, 'sample', 'PG003'),

(5, 'sample', 'PG003'),

(6, 'sample', 'PG001'),

(7, 'sample', 'PG002'),

(8, 'sample', 'PG002'),

(9, 'sample', 'PG001'),

(10, 'sample', 'PG001');

ALTER TABLE dsai\_t\_sales

add FOREIGN KEY(product\_code) references dsai\_m\_product(product\_id),

add FOREIGN KEY(customer\_id) references dsai\_m\_customer(customer\_id);

-- 4.3 Update operations

-- 1

Alter table dsai\_m\_customer

add address varchar(100);

UPDATE dsai\_m\_customer

set address = '789 Elm St' where customer\_id = 'IDC000002';

-- 2

CREATE TABLE dsai\_m\_unit\_price(

unit\_price\_id int primary key,

price float,

currency\_id int

);

INSERT INTO dsai\_m\_unit\_price

Values (1,12.44, 1),

(2,122.44, 1),

(3,5443.44, 1),

(4,33.44, 1);

UPDATE dsai\_m\_unit\_price

SET price = price+(price+0.10)

WHERE unit\_price\_id in

(SELECT product\_id FROM dsai\_m\_product where product\_group\_code = 'PG001');

-- 3

CREATE TABLE dsai\_m\_loyalty\_program(

loyalty\_program\_code varchar(10) primary key,

prog\_desc varchar(200)

);

ALTER TABLE dsai\_t\_sales

add purchase\_amount float,

add loyalty\_program\_code varchar(10),

add foreign key (loyalty\_program\_code) references dsai\_m\_loyalty\_program(loyalty\_program\_code);

INSERT INTO dsai\_m\_loyalty\_program

Values

('LPC001', 'sample description'),

('LPC002', 'sample description'),

('LPC003', 'sample description'),

('LPC004', 'sample description'),

('LPC005', 'sample description'),

('LPC006', 'sample description'),

('NA', 'No programs applied');

UPDATE dsai\_t\_sales

set purchase\_amount =

CASE WHEN customer\_id='IDC000010' THEN 30.0

ELSE 100.5

END,

loyalty\_program\_code = 'LPC003';

UPDATE dsai\_t\_sales

SET loyalty\_program\_code =

IF(purchase\_amount>50, 'LPC003', 'NA');

-- 4

CREATE TABLE dsai\_m\_location(

location\_code varchar(7) primary key,

location\_name varchar(100)

);

INSERT INTO dsai\_m\_location

Values ('L001','sample location'),

('L002','sample location'),

('L003','sample location'),

('L004','sample location');

update dsai\_m\_location

set location\_name = 'T Nagar'

WHERE location\_code = 'L002';

-- 5

UPDATE dsai\_t\_sales

set sales\_quantity = sales\_quantity+(sales\_quantity\*0.05)

where sales\_date >= date('2010-02-01') and sales\_date <date('2010-03-01');

-- 6

CREATE TABLE dsai\_m\_promotion(

promotion\_code varchar(10) primary key,

promotion\_desc varchar(20));

INSERT INTO dsai\_m\_promotion

Values ('PRO0001','sample description'),

('PRO0002','sample description'),

('PRO0003','sample description'),

('PRO0004','sample description');

alter table dsai\_t\_sales

add promotion\_code varchar(10),

add foreign key(promotion\_code) references dsai\_m\_promotion(promotion\_code);

update dsai\_t\_sales

set promotion\_code = 'PRO0001'

where sales\_date >= date('2010-02-01');

-- 4.4 Alter Command

-- 1

CREATE TABLE dsai\_m\_discount(

discount\_id int primary key,

discount\_desc varchar(200));

ALTER TABLE dsai\_m\_discount

add discount\_perc decimal;

INSERT INTO dsai\_m\_discount VALUES (30,'sample disc description',30.5),(5,'sample disc description',5.2);

UPDATE dsai\_m\_discount

set discount\_perc = 20.0;

-- 2

CREATE TABLE dsai\_m\_sales\_period(

sales\_date date primary key,

period varchar(30)

) as (select DISTINCT(sales\_date) from dsai\_t\_sales);

ALTER TABLE dsai\_t\_sales

ADD CONSTRAINT fk\_sales\_date foreign key (sales\_date) references dsai\_m\_sales\_period(sales\_date);

-- 3

ALTER TABLE dsai\_t\_sales

ADD column\_history varchar(200);

ALTER TABLE dsai\_t\_sales

modify column\_history enum("data1","data2","data3");

-- 4

CREATE INDEX cust\_id

ON dsai\_m\_customer(customer\_id);

-- 5

ALTER TABLE dsai\_m\_customer

change customer\_name Customer\_Name varchar(100);

-- 6

DROP INDEX cust\_id ON dsai\_m\_customer;

-- 7

ALTER TABLE dsai\_t\_sales

DROP CONSTRAINT fk\_sales\_date ;

-- 8

ALTER TABLE dsai\_m\_product\_group

ADD CONSTRAINT PK\_product\_group\_code PRIMARY KEY (product\_group\_code);

-- 4.5 Delete operations

-- 1

DELETE FROM dsai\_t\_sales

WHERE customer\_id = 'IDC000003';

DELETE FROM dsai\_m\_customer

WHERE customer\_id = 'IDC000003';

-- 2

INSERT INTO dsai\_m\_product\_group

values ('PG004', 'Oil');

INSERT INTO dsai\_m\_product

values (11, 'exp product', 'PG004');

DELETE FROM dsai\_m\_product

Where product\_group\_code IN

(SELECT product\_group\_code from dsai\_m\_product\_group where group\_desc LIKE 'Oil');

-- 3

DELETE FROM dsai\_t\_sales

WHERE product\_code in

(select unit\_price\_id from dsai\_m\_unit\_price where price>100.0);

DELETE FROM dsai\_m\_product

WHERE product\_id in

(select unit\_price\_id from dsai\_m\_unit\_price where price>100.0);

-- 4

INSERT INTO dsai\_m\_customer

values ('IDC000015','ljkhfkjh', 'qwd','safdasc','jkkjbgdsa');

DELETE FROM dsai\_m\_customer

WHERE NOT EXISTS

(select customer\_id from dsai\_t\_sales);

-- 5

DELETE FROM dsai\_t\_sales

WHERE (customer\_id, product\_code, sales\_date) IN (

SELECT customer\_id, product\_code, sales\_date FROM

(SELECT \* FROM dsai\_t\_sales

ORDER BY sales\_date ASC

LIMIT 100) AS oldest\_100

);

-- 6

DELETE FROM dsai\_t\_sales

WHERE sales\_quantity=0;

-- 7

ALTER TABLE dsai\_m\_discount

ADD expired\_bool enum('expired', 'active');

DELETE FROM dsai\_m\_discount

WHERE expired\_bool = 'expired';

-- 8

DELETE FROM dsai\_m\_sales\_period

WHERE YEAR(sales\_date) =2022;

-- 4.6 DROP Operations

-- 1

DROP TABLE dsai\_m\_product\_group;

-- 2

DROP TABLE if exists dsai\_t\_sales;

-- 4.7 truncate operations

-- 1

TRUNCATE TABLE dsai\_m\_customer;

-- 2

truncate table dsai\_m\_product\_group;

-- 3

truncate table dsai\_t\_sales;

-- 4

truncate table dsai\_m\_discount;

-- 5

truncate table dsai\_m\_location;