***1. DML and DDL***

***DML: SELECT, INSERT, UPDATE, DELETE DDL: CREATE, ALTER, DROP***

create table customers(

id int,

full\_name varchar(50) not null,

timestamp timestamp not null,

delivery\_address text not null ,

primary key (id)

)

;

create table products(

id varchar(40),

name varchar(40) unique not null,

description text,

price double precision not null check ( price > 0 ),

primary key (id)

)

;

create table orders(

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DML examples;

select \* from customers;

insert into customers(id, full\_name) values(1, 'Erzhan');

update customers set full\_name='Kanat' where full\_name='Erzan';

delete from customers where full\_name='Kanat';

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DDL examples;

create table customers(

id int unique ,

full\_name varchar(50) not null,

timestamp timestamp not null,

delivery\_address text not null ,

primary key (id)

)

;

drop table customers;

alter table customers drop column email;

alter table customers add column email;

2.

code int,

customer\_id int references customers(id),

total\_sum double precision not null check ( total\_sum > 0 ),

is\_paid bool not null,

primary key (code)

)

;

create table order\_items(

order\_code int references orders(code),

product\_id varchar references products(id),

quantity int not null check ( quantity > 0 ),

primary key (order\_code,product\_id)

)

;

insert into customers(id, full\_name, timestamp, delivery\_address) VALUES (1, 'Arman', '200

8-01-01 00:00:01

', 'Kazybek street, 175');

insert into customers(id, full\_name, timestamp, delivery\_address) VALUES (2, 'Abubakir', '200

8-02-04 00:40:01

', 'Kazybek street, 180');

insert into orders(code, customer\_id, total\_sum, is\_paid) values (2, 2, 50.5, true);

insert into products(id, name, description, price) values (1, 'apple', 'delicious', 81.9);

insert into order\_items(order\_code, product\_id, quantity) VALUES (2, 1, 1000);

select \* from customers;

select \* from orders;

select \* from products;

select \* from order\_items;

3.

create table students(

full\_name varchar(50) ,

age int check(age > 0),

birthdate date not null,

gender varchar(10) not null,

average\_grade double precision check (average\_grade >= 0),

information text,

dormitory boolean not null,

additional\_info text,

primary key (full\_name)

)

;

create table instructor(

full\_name varchar(50),

language varchar(20) not null,

experience int check ( experience >=0 ),

remote\_possibility boolean not null,

primary key (full\_name)

)

;

create table participants(

lesson\_title varchar(100) not null,

instructor varchar(50) not null references instructor(full\_name),

student varchar(50) not null references students(full\_name),

room\_number int check ( room\_number > 0)

)

;

insert into students(full\_name, age, birthdate, gender, average\_grade, dormitory, addition

al\_info) VALUES ('Arman S.', 18, '1992-01-09', 'Snake', 4.32, true, 'No matter');

select \* from students;

insert into instructor(full\_name, language, experience, remote\_possibility) values ('Kanat

K.', 'english', 100, false);

select \* from instructor;

insert into participants(lesson\_title, instructor, student, room\_number) values('Databas

e', 'Kanat K.', 'Arman S.', 312);

select \* from participants;

delete from participants where instructor='Kanat K.';

update instructor set language='russian' where language='english';

4.

insert into products(id, name, description, price) values (1, 'apple', 'delicious', 81.9);

update customers set id=4 where id=5;

delete from customers where full\_name='Kanat';