1. **Завдання**

SELECT \* FROM pandemic.infectious\_cases;

1. **Завдання**

create table entities (

Entity\_id INT AUTO\_INCREMENT PRIMARY KEY,

Entity VARCHAR(255) UNIQUE NOT NULL,

Code VARCHAR(255) NOT NULL);

insert into entities (entity, code)

select distinct Entity, Code from infectious\_cases;

create table infectious\_numbers(

Case\_id INT AUTO\_INCREMENT PRIMARY KEY,

Entity\_id INT,

Year INT NOT NULL,

Number\_yaws INT,

Polio\_cases INT,

Cases\_guinea\_worm INT,

Number\_rabies FLOAT,

Number\_malaria FLOAT,

Number\_hiv FLOAT,

Number\_tuberculosis FLOAT,

Number\_smallpox INT,

Number\_cholera\_cases INT,

foreign key (Entity\_id) REFERENCES entities(Entity\_id)

);

insert into infectious\_numbers (

Entity\_id, Year, Number\_yaws, Polio\_cases, Cases\_guinea\_worm, Number\_rabies,

Number\_malaria, Number\_hiv, Number\_tuberculosis, Number\_smallpox, Number\_cholera\_cases

)

select

e.Entity\_id,

o.Year,

COALESCE(NULLIF(o.Number\_yaws, ''), 0),

COALESCE(NULLIF(o.Polio\_cases, ''), 0),

COALESCE(NULLIF(o.Cases\_guinea\_worm, ''), 0),

COALESCE(NULLIF(o.Number\_rabies, ''), 0.0),

COALESCE(NULLIF(o.Number\_malaria, ''), 0.0),

COALESCE(NULLIF(o.Number\_hiv, ''), 0.0),

COALESCE(NULLIF(o.Number\_tuberculosis, ''), 0.0),

COALESCE(NULLIF(o.Number\_smallpox, ''), 0),

COALESCE(NULLIF(o.Number\_cholera\_cases, ''), 0)

from infectious\_cases AS o

join entities AS e ON o.Entity = e.Entity;

1. **Завдання**

select

Entity\_id,

AVG(NULLIF(Number\_rabies, '')) AS avg\_rabies,

MIN(NULLIF(Number\_rabies, '')) AS min\_rabies,

MAX(NULLIF(Number\_rabies, '')) AS max\_rabies,

SUM(NULLIF(Number\_rabies, '')) AS sum\_rabies

from

infectious\_numbers

group by

Entity\_id

order by

avg\_rabies DESC

limit 10

1. **Завдання**

select

year,

makedate(year, 1) as infection\_dates,

curdate() as current\_dates,

timestampdiff(year, MAKEDATE(year, 1), curdate()) as dates\_difference

from

infectious\_numbers

1. **Завдання**

DELIMITER //

DROP FUNCTION IF EXISTS CalculateYears;

CREATE FUNCTION CalculateYears(year INT) RETURNS INT DETERMINISTIC

BEGIN

DECLARE result INT;

SET result = TIMESTAMPDIFF(YEAR, MAKEDATE(year, 1), CURDATE());

RETURN result;

END //

DELIMITER ;

SELECT CalculateYears(year) from infectious\_numbers;