1.

CREATE DATABASE IF NOT EXISTS pandemic;

use pandemic;

2.

use pandemic;

DROP TABLE IF EXISTS cases;

DROP TABLE IF EXISTS countries;

CREATE TABLE countries (

id INT PRIMARY KEY AUTO\_INCREMENT,

country\_name VARCHAR(100),

country\_code VARCHAR(10)

);

CREATE TABLE cases (

id INT PRIMARY KEY AUTO\_INCREMENT,

country\_id INT,

year INT,

number\_yaws TEXT,

polio\_cases INT, cases\_guinea\_worm INT, number\_rabies TEXT,

number\_malaria TEXT, number\_hiv TEXT, number\_tuberculosis TEXT,

number\_smallpox TEXT, number\_cholera\_cases TEXT,

FOREIGN KEY (country\_id) REFERENCES countries(id)

);

INSERT INTO countries (country\_name, country\_code)

SELECT Entity, Code FROM infectious\_cases GROUP BY Entity, Code;

INSERT INTO cases (country\_id, year, number\_yaws, polio\_cases,

cases\_guinea\_worm, number\_rabies, number\_malaria,

number\_hiv, number\_tuberculosis, number\_smallpox,

number\_cholera\_cases)

SELECT (SELECT id FROM countries C WHERE ic.Entity=c.country\_name) country\_id,

Year, Number\_yaws, polio\_cases, cases\_guinea\_worm, Number\_rabies, Number\_malaria,

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

FROM infectious\_cases ic;

SELECT \* FROM cases

3.

use pandemic;

SELECT country\_id, AVG(number\_rabies) average, MIN(number\_rabies) min, MAX(number\_rabies) max, SUM(number\_rabies) sum

FROM cases

WHERE number\_rabies <> “”

GROUP BY country\_id

ORDER BY average DESC

LIMIT 10

4.

use pandemic;

SELECT id, year, MAKEDATE(year,1) base\_date, CURDATE() today\_date, TIMESTAMPDIFF(YEAR, MAKEDATE (year, 1), CURDATE()) years\_diff FROM cases

5.

DELIMITER //

CREATE FUNCTION count\_year\_diff(year INT)

RETURNS INT

DETERMINISTIC

NO SQL

BEGIN

DECLARE result INT;

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

RETURN result;

END //

DELIMITER ;

SELECT id, year, count year\_diff(year) years\_diff FROM cases