

1.1. create schema pandemic;

1.2. use pandemic;

2.1. create table countries (

id int primary key auto_increment,

country_name varchar(40),

country_code varchar(10)

);

2.2. insert into countries (country_name, country_code)

select distinct entity, code from infectious_cases;

2.3. create table infectious_cases_normalized (

id int primary key auto_increment,

country_id int not null,

year int,

number_yaws text,

polio_cases int,

cases_guinea_worm int,

number_rabies varchar(45),

number_malaria varchar(45),

number_hiv varchar(45),

number_tuberculosis varchar(45),

number_smallpox varchar(45),

number_cholera_cases varchar(45),

foreign key (countries_id) references countries(id)

);

2.4. insert into infectious_cases_normalized (

country_id,

year,

number_yaws,

polio_cases,

cases_guinea_worm,

number_rabies,

number_malaria,

```

        number_hiv,
        number_tuberculosis,
        number_smallpox,
        number_cholera_cases
    )
select distinct
countries.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
inner join countries
on countries.country_code = infectious_cases.Code
and countries.country_name = infectious_cases.Entity;

```

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3. select Entity, Code,
round(min(Number_rabies), 5) as min_rabies,
round(max(Number_rabies), 5) as max_rabies,
round(avg(Number_rabies), 5) as average_rabies,
round(sum(Number_rabies), 5) as total_rabies
from infectious_cases
where Number_rabies is not null and Number_rabies != ''
group by Entity, Code
order by average_rabies desc
limit 10;

```

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4. alter table infectious_cases_normalized

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```
add column full_date date,  
add column curr_date date,  
add column difference int;
```

```
SET SQL_SAFE_UPDATES = 0;  
update infectious_cases_normalized  
set full_date = makedate(year, 1),  
    curr_date = curdate(),  
    difference = timestampdiff(year, makedate(year, 1), curdate())  
where year is not null;
```

```
SET SQL_SAFE_UPDATES = 1;
```

5. drop function if exists getDateDifference;

```
DELIMITER //  
create function getDateDifference(year int)  
returns int  
no sql  
begin  
declare res int;  
set res = timestampdiff(year, makedate(year, 1), curdate());  
return res;  
end //  
DELIMITER ;
```

```
alter table infectious_cases  
add column difference int;
```

```
SET SQL_SAFE_UPDATES = 0;  
update infectious_cases  
set  
    difference = getDateDifference(Year);  
SET SQL_SAFE_UPDATES = 1;
```