

# Screencast 4-8

Other functions

Use database DBWORLD

## Task 1

How will aggregate functions work if there are no records in the data source?

```
select sum(population), max(population), avg(population) from country where name='unknown'
```

## Task 2

Create a report, that will contain regions and comma-separated list of country codes, where English is an official language

```
select data.region, string_agg(data.code, ', ') from (  
select distinct country.code, country.region  
  from country  
       join countrylanguage as cl on cl.countrycode = country.code  
       where cl."language"='English' and isofficial='t') as data  
group by data.region
```

## Task 3

Does there exist any language with popularity > 10% in all countries of some continent where it is spoken?

```
select bool_and(percentage>10), continent, "language"  
  from countrylanguage as cl join country as c on c.code=cl.countrycode  
group by continent, language  
having bool_and(percentage>10) = true
```