In this assignment you are required to write SQL code, using *world* database.

1- List the name of the countries and the distinct languages that is spoken in the world by applying Cartesian product of relation country and coutnrylanguage.
2- Find the name of the countries whose official language is either French or English, using *union* operator.
3- Find the number of distinct countries that speak English as their official language using *inner join* keyword.
4- Find the languages spoken in USA using
    a. Non-correlated subquery
    b. Correlated subquery
5- Using conditional statement, list the names of the countries along with a field with a value of either 'more' or 'less' to show whether the population is more than average population of the countries in the world or less than that.
6- Find the countries that have more than 50 cities.
7- Left outer join countries in South America with the countries whose government form is *federal republic* on common government form.
8- Left outer join countries in South America with the countries whose government form is *federal republic* on countries' names.
9- Find the language that is mostly spoken in the world.

Submission:
- You only submit one code snippet created in MySql, containing all the codes required for this assignment. The file name is your utorid.
- Every question should be solved with one statement only, except for question 7 and 8 for which you can create views further to your final *select* statement, if required.
- Mark will not be awarded to the codes that contains any error.
- Your code should be runnable at university machines and DBMS (i.e. MYSQL)

(10 Marks)