Report ETL

# Task 2. Generate Test Data in Storage Layers

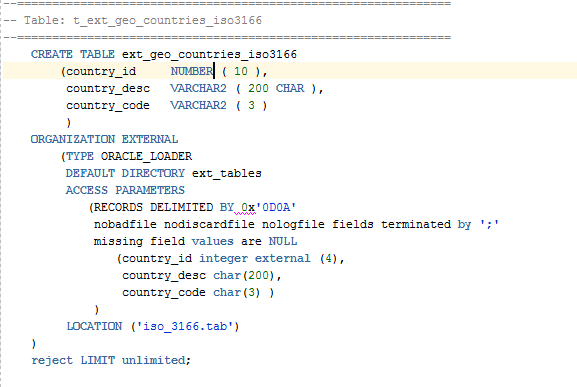
ETL procedures starts with executing pre-configured framework “create\_schemas.sql” – for grants to users.

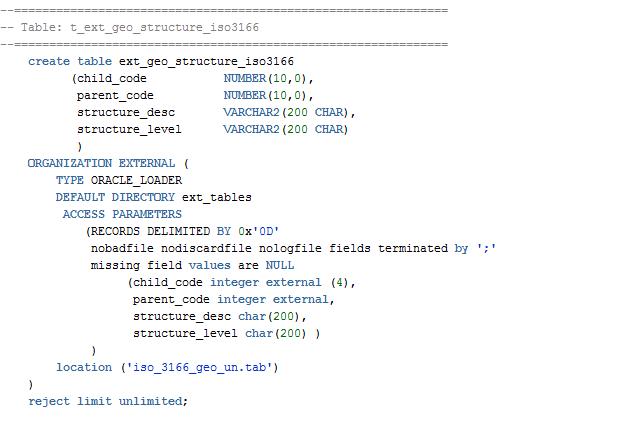
## sa\_src

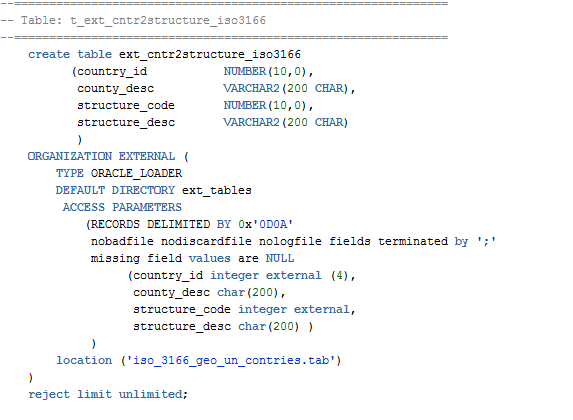
### Creation of directory



1. Creation of external tables



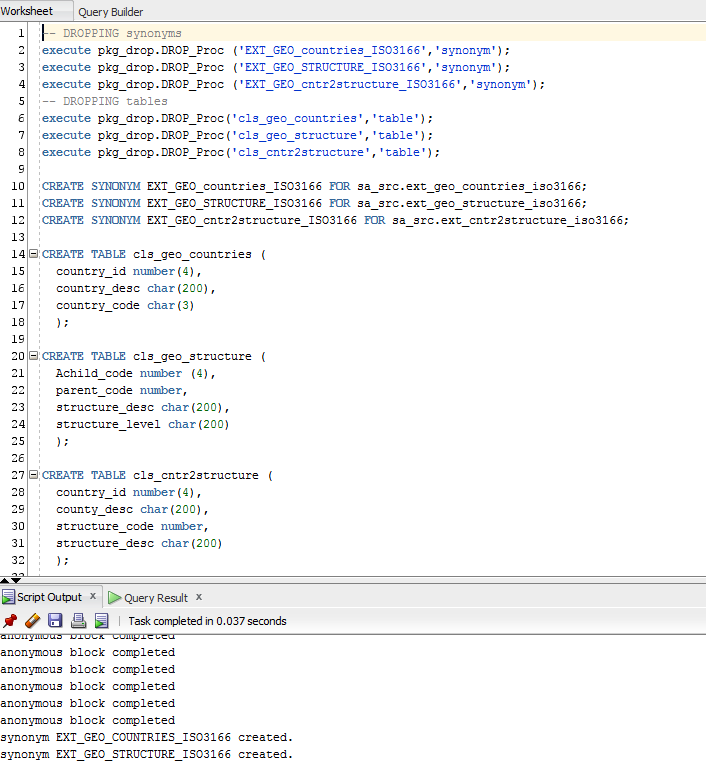




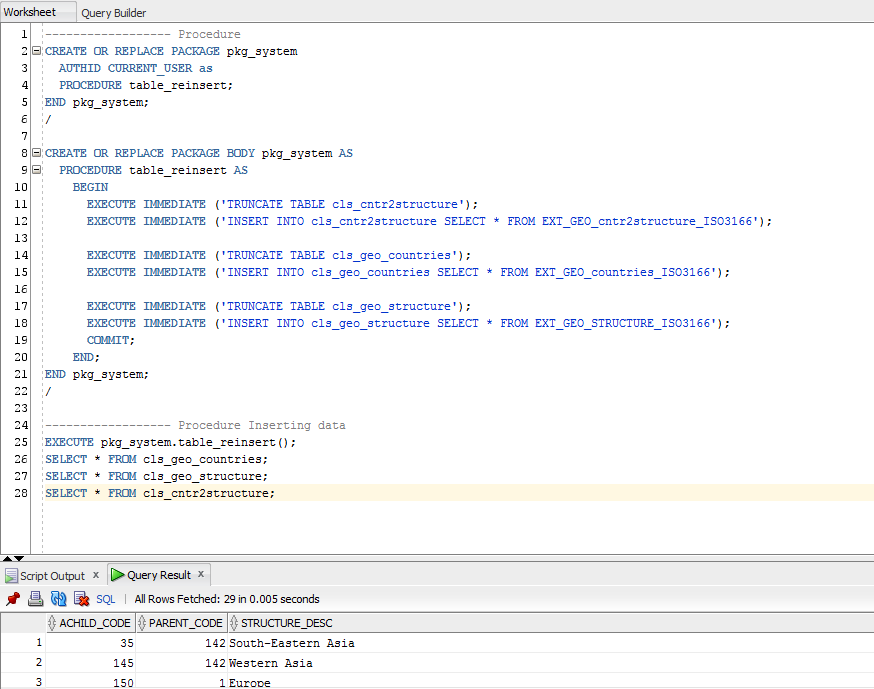
## bl\_cl

### Package-Procedure

Pre-configured framework with drop package



### INSERT package procedure



## bl\_3nf

### Structure

3nf schema will be consist of 4 tables:

1. World (nf\_world);
2. Continents (nf\_continents);
3. Regions (nf\_regions);
4. Countries (nf\_countries).

3 synonyms from bl\_cl shema:

1. cls\_geo\_structure;
2. cls\_geo\_countries;
3. cls\_cntr2structure

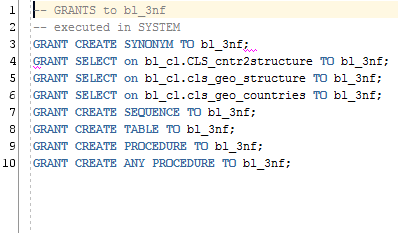
And 3 sequences:

1. For World (seq\_world);
2. For Continents (seq\_continent);
3. For Regions (seq\_region).

\* Countries do not need autoincremented id because it has “country\_id” field.

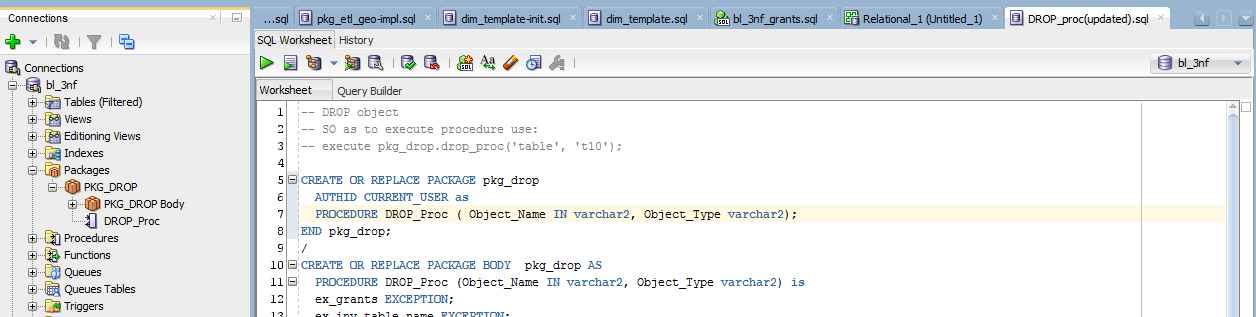
### Grants

Additional grans should be set to bl\_3nf from SYSTEM user:



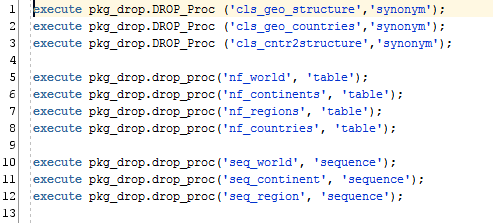
### Package-Procedure

Pre-configured framework with drop package will be also used in bl\_3nf:

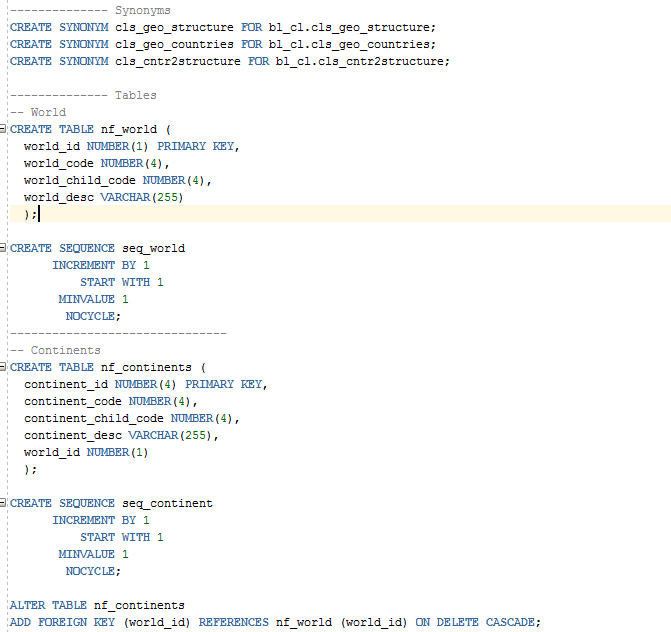


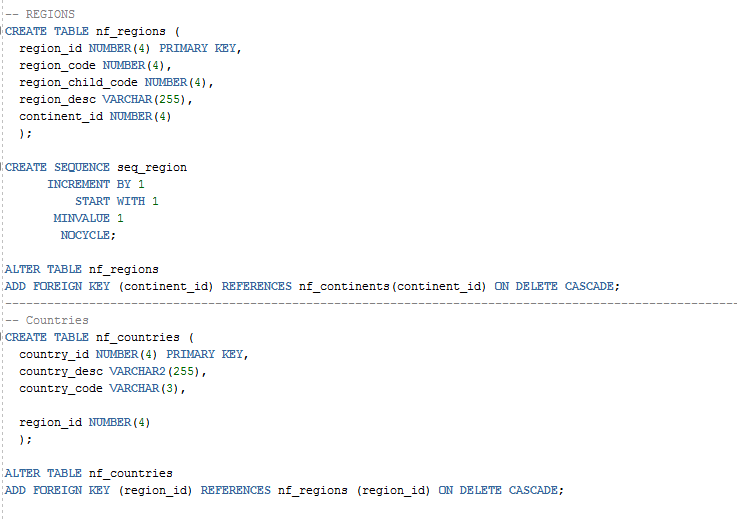
### Building structure

1. Dropping existing objects

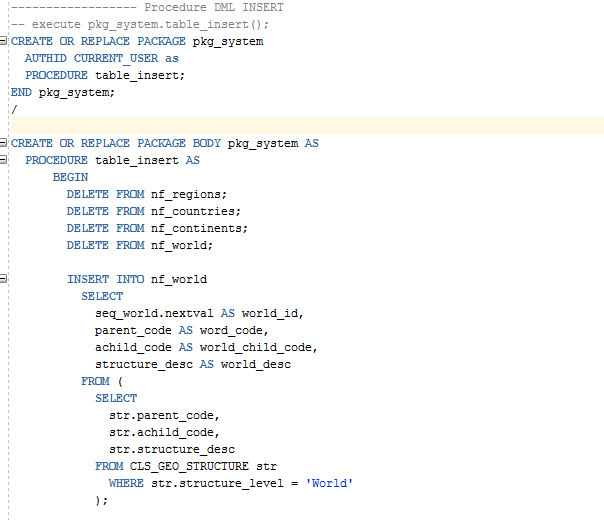


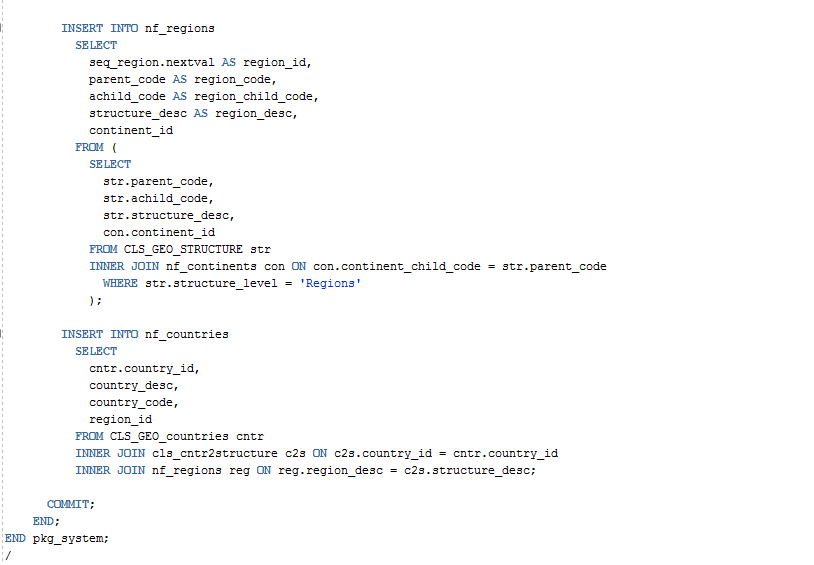
### DDL operations



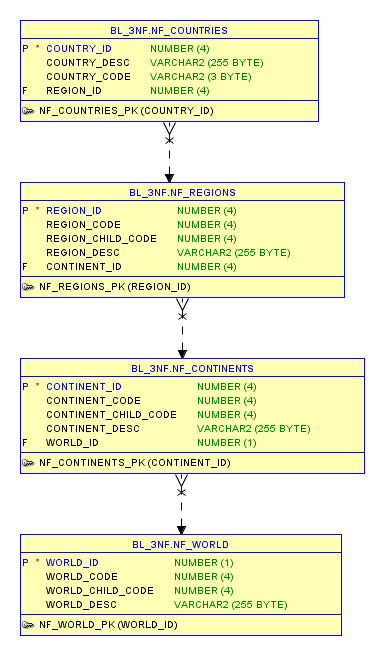


### DML operations in package procedure





### The result of bl\_3nf:



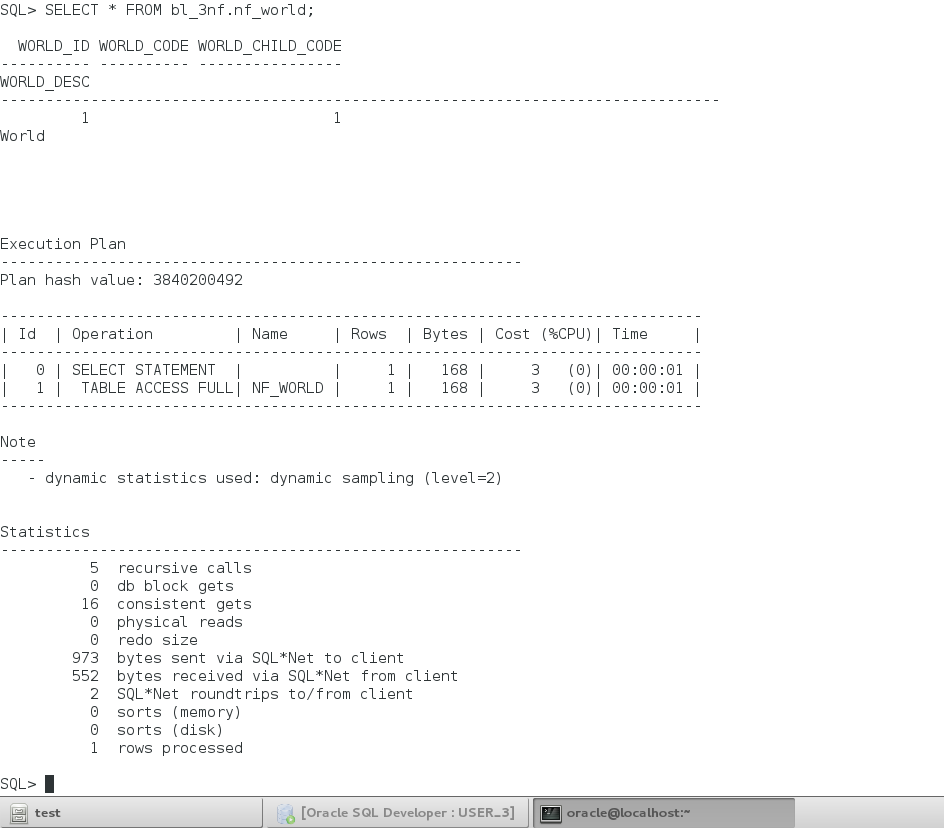
# Task 3. SQL\*Plus

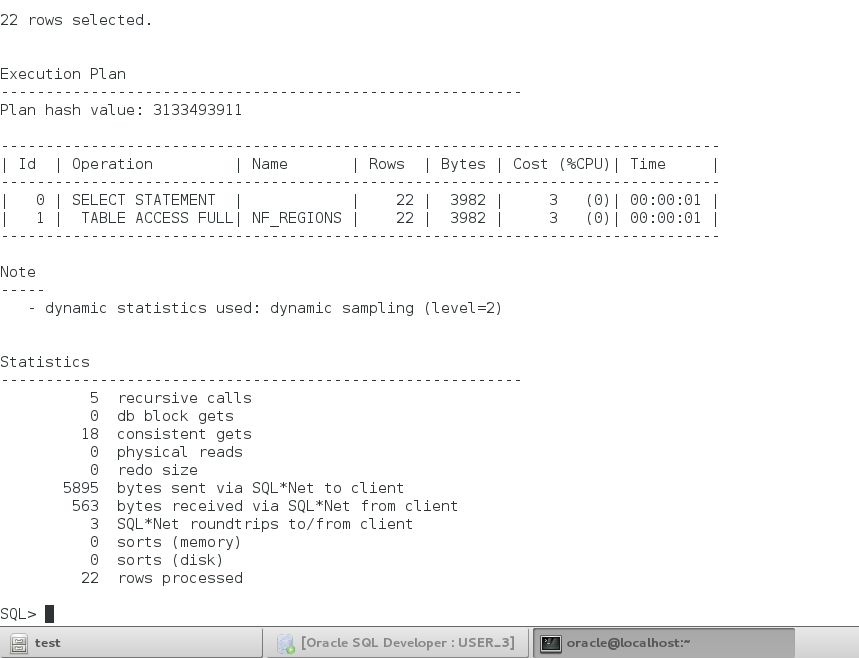
In Oracle Terminal:

## Setting autotrace on so as to get execution plan to SYSTEM user



Executing tables

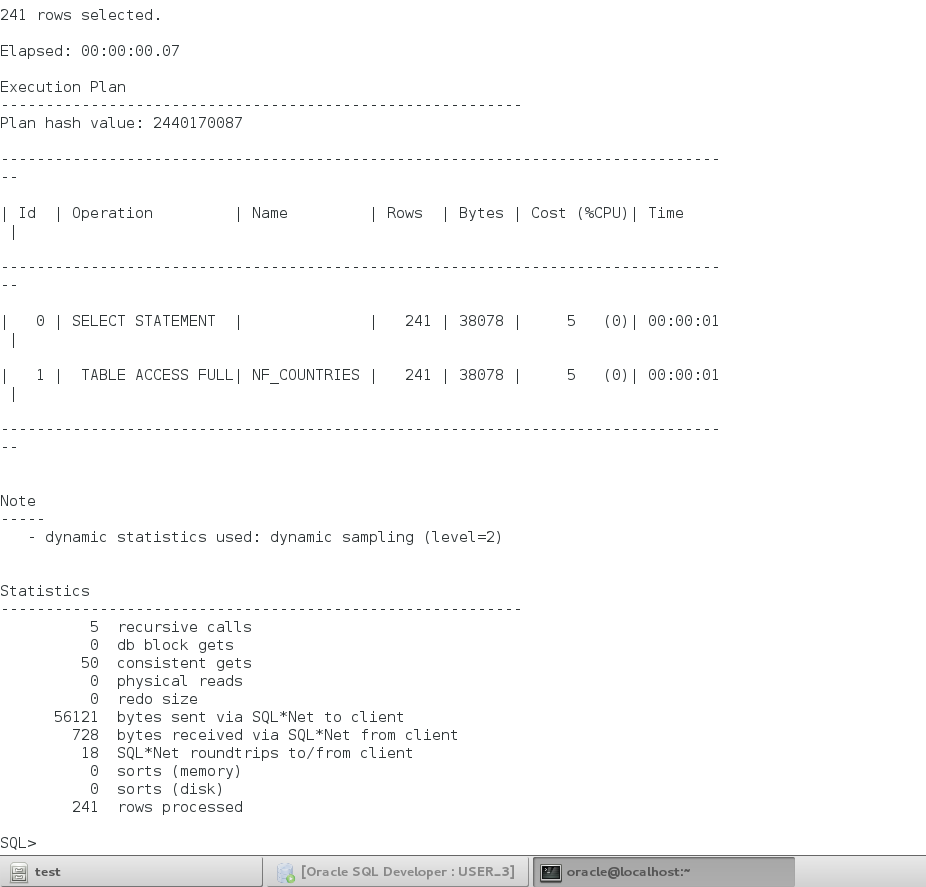




## Timing

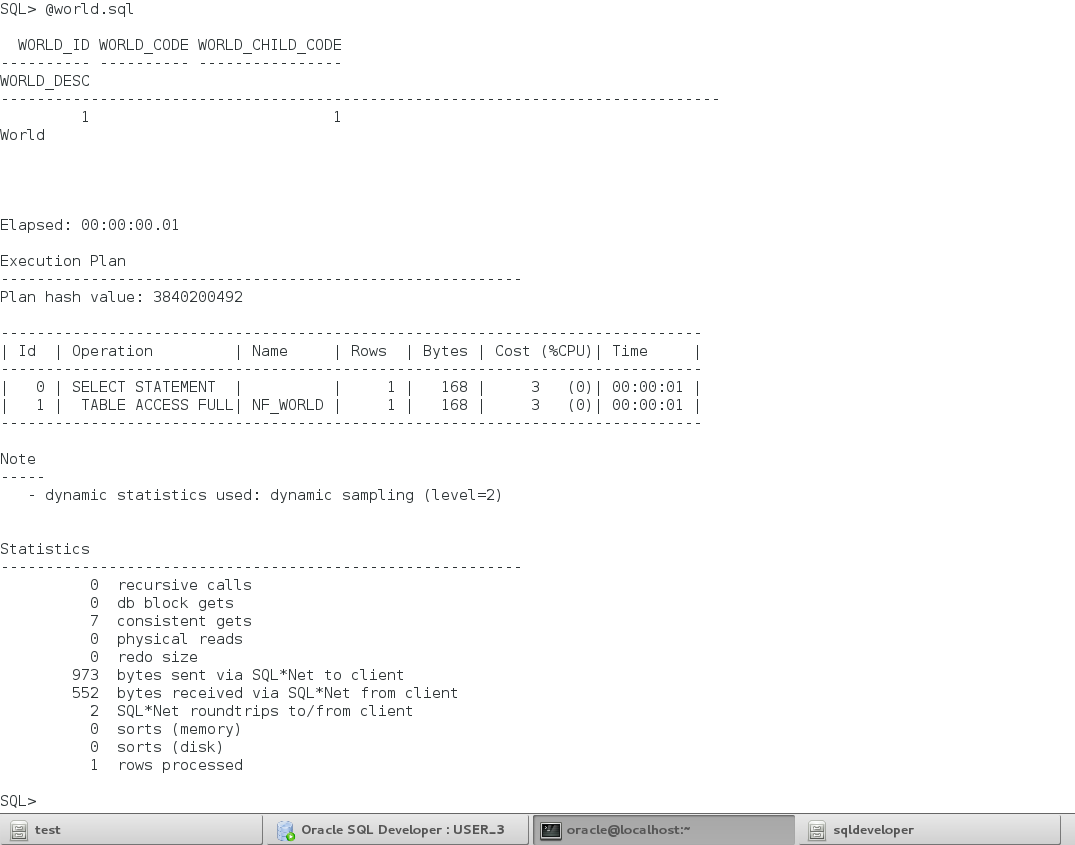


Only “countries” table forced Oracle to make some work and elapse some time:



## Running script

Simple select statement was made in SQL Developer and saved in default workplace on Linux. Then in was opened with only @ wildcard in SQL\*Plus



## Save data to file

Spool makes it possible to save data to file:

