

Hands On Lab – Export SQL to .CSV

In this week's folder, you are given instructions for restoring the `tb` database into MySQL. After we've loaded our `tb` database into our database server, we'll want to create a .CSV file to load into Excel (or another spreadsheet program).

Specifically, we want to **export a .CSV file that contains total tuberculosis cases by country by year**. So we need to do some data transformation work in SQL to get our SELECT statement how we want it, then wrap the SELECT statement into a statement that exports the data to a .CSV file. Then we **load the .CSV file into Excel**.

On the right is the first few rows of the resultset that we want to get from the SELECT statement that we'll run against the `tb` table in our `tb` database. This will require two transformations on the single table.

country	year	cases
Afghanistan	1997	128
Afghanistan	1998	1778
Afghanistan	1999	745
Afghanistan	2000	2666
Afghanistan	2001	4639
Afghanistan	2002	6509
Afghanistan	2003	6528
Afghanistan	2004	8245
Afghanistan	2005	9949
Afghanistan	2006	12469
Afghanistan	2007	13213
Afghanistan	2008	13136
Afghanistan	2009	12503
Afghanistan	2010	12947
Afghanistan	2011	15542
Afghanistan	2012	15774
Algeria	1997	8902
Algeria	1999	7088
Algeria	2000	8050

...

Possible Solution

```
SELECT * FROM tb LIMIT 20;
```

```
SELECT country, year, sex, child+adult+elderly AS cases  
FROM tb;
```

```
DROP TABLE IF EXISTS tb_cases;
```

```
CREATE TABLE tb_cases AS  
    SELECT country, year, sex, child+adult+elderly AS cases  
FROM tb;
```

```
SELECT *  
FROM tb_cases  
WHERE country = 'Afghanistan'  
ORDER BY country, year  
LIMIT 50;
```

```
SELECT country, year, SUM(cases) AS cases  
    FROM tb_cases  
GROUP BY country, year  
HAVING cases IS NOT NULL  
ORDER BY country, year;
```

```
/* Note that this statement will not overwrite file if it already exists  
    Make sure that you are writing your .CSV file to a place on your Mac or PC  
    where MySQL has write privileges  
*/
```

```
SELECT country, year, SUM(cases) AS cases INTO OUTFILE '/Users/Public/tb.csv'  
FIELDS TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"'  
ESCAPED BY '\\\  
LINES TERMINATED BY '\\n'  
FROM tb_cases  
GROUP BY country, year  
HAVING cases IS NOT NULL  
ORDER BY country, year;
```