SQL Basics

1.

The example uses a WHERE clause to show the population of 'France'. Note that strings should be in 'single quotes';

Modify it to show the population of Germany

**SELECT population FROM world
WHERE name = 'Germany'**

2.

Checking a list The word **IN** allows us to check if an item is in a list. The example shows the name and population for the countries 'Brazil', 'Russia', 'India' and 'China'.

Show the name and the population for 'Sweden', 'Norway' and 'Denmark'.

**SELECT name, population FROM world
WHERE name IN ('Sweden', 'Norway' , 'Denmark');**

3.

Which countries are not too small and not too big? `BETWEEN` allows range checking (range specified is inclusive of boundary values). The example below shows countries with an area of 250,000-300,000 sq. km. Modify it to show the country and the area for countries with an area between 200,000 and 250,000.

**SELECT name, area FROM world
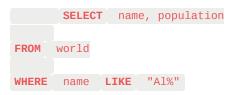WHERE area BETWEEN 200000 AND 250000;**

QUIZ

1. Select the code which produces this table

name	population
Bahrain	1234571
Swaziland	1220000
Timor-Leste	1066409

```
SELECT name, population
FROM world
WHERE populationBETWEEN 1000000 AND 1250000;
```

2. Pick the result you would obtain from this code:

```
SELECT   name, population

FROM   world

WHERE   name   LIKE   "Al%"
```

Albania	3200000
Algeria	32900000

3. Select the code which shows the countries that end in A or L

```
SELECT nameFROM world
WHERE nameLIKE '%a'OR nameLIKE '%l'
```

4. Pick the result from the query

```
SELECT   name, length (name)

FROM   world

WHERE   length (name)=5   and   region='Europe'
```

name	length(name)

Italy	5
Malta	5
Spain	5

5. Here are the first few rows of the world table:

name	region	area	population	gdp
Afghanistan	South Asia	652225	26000000	
Albania	Europe	28728	3200000	6656000000
Algeria	Middle East	2400000	32900000	75012000000
Andorra	Europe	468	64000	
...				

Pick the result you would obtain from this code:

```
SELECT name, area*2 FROM world WHERE population = 64000
```

Andorra 936

6. Select the code that would show the countries with an area larger than 50000 and a population smaller than 10000000

```
SELECT name, area, population
FROM world
WHERE area > 50000AND population < 10000000
```

7. Select the code that shows the population density of China, Australia, Nigeria and France

```
SELECT name, population/area
FROM world
WHERE nameIN ('China', 'Nigeria', 'France', 'Australia')
```