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STAT 4260
Assignment 2

1.

```
CREATE TABLE city
(ID INT AUTO_INCREMENT,
Name CHAR(35),
CountryCode CHAR(3),
District CHAR(20),
Population INT,
CONSTRAINT pk_city PRIMARY KEY (ID)
);
```

2.

The countrylanguage table contains four variables: CountryCode, Language, IsOfficial, and Percentage. CountryCode is a fixed-length character variable of length 3, meaning is can only store three characters, and anything extra will be truncated. Language is a fixed-length character variable of length 30. Together, they form the primary key; using both allows multiple languages to be listed for each country code. IsOfficial is limited to either the character 'T' or 'F', as we interpret as true or false, and the default value is 'F'. Percentage is a floating-point value with a maximum of four digits total, and one decimal place in the decimal part. In other words, it can be a value from 0.0 to 999.9, limited to the tenths place. The default value for this variable is 0.0.

3.

```
SELECT Name, CountryCode, Population/1000000
FROM city;
```

4.

```
SELECT Name, CountryCode, Population/1000000 Pop_millions
FROM city;
```

5.

```
SELECT DISTINCT Continent FROM country;
```

6.

This query returns a list of all of the names of the cites in which the population is greater than two million.

7.

```
CREATE VIEW language_vw AS
SELECT Language Official_Lang, CountryCode, Percentage
FROM countrylanguage;
```

8.

```
SELECT Official_Lang, CountryCode
FROM language_vw;
```

9.

```
SELECT Name, Region, Population
FROM country
WHERE Continent = 'Asia' AND Population > 100000;
```

10.

```
SELECT Name, Region, Population/100000 Pop_HundTho
FROM country
WHERE Continent = 'Asia' AND Population > 100000;
```

11.

```
SELECT Name, Region
FROM country
WHERE (Continent = 'Asia' OR Continent = 'Africa') AND Population < 1000000;
```

12.

```
SELECT Name, Region
FROM country
WHERE (Continent = 'Asia' OR Continent = 'Africa') AND Population < 1000000
ORDER BY Region;
```

13.

```
SELECT Name, Region
FROM country
WHERE (Continent = 'Asia' OR Continent = 'Africa') AND Population < 1000000
ORDER BY Region, Population;
```

14.

```
SELECT Name, Region
```

FROM country
WHERE (Continent = 'Asia' AND Population < 1000000) OR
(Continent = 'Africa' AND Population < 100000);

15.

a. TRUE

b. FALSE

c. FALSE

d. TRUE

e. FALSE

f. TRUE

g. TRUE

h. TRUE

i. FALSE

j. FALSE

k. FALSE

l. TRUE