CS130 Lab 9

Started on	Thursday, 9 December 2021, 11:33 PM
State	Finished
Completed on	Friday, 10 December 2021, 4:48 PM
Time taken	17 hours 14 mins
Grade	**4.00** out of 6.00 (**66.67%**)

Question **1**
Correct
Mark 1.00 out of 1.00
Flag question

After completing the lab assessment sheet for CS130 Lab 9 - what does the output from the query below mean in relation to the air quality monitoring scenario outlined in the lab assessment?

```
SELECT Lab9_Station.EIONetCode,Lab9_Station.Station,Lab9_Station.Status,Lab9_Monitors.Frequency,Lab9_Pollutant.EEAPol,Lab9_Pollutant.Pollutant
FROM Lab9_Station,Lab9_Monitors,Lab9_Pollutant
where (Lab9_Station.EIONetCode = Lab9_Monitors.EIONetCode) and (Lab9_Pollutant.EEAPol = Lab9_Monitors.EEAPol);
```

Select one:

- a. This query will outline all stations and the pollutants monitored at those stations where the frequency is hourly.
- b. This query will outline all stations and the pollutants monitored at those stations where the frequency is daily.
- c. This query will outline the frequency of monitoring and reporting for all stations and the pollutants monitored at those stations. ✔
- d. This query performs a Cartestian Join between the three tables in the FROM statement.
- e. None of these options are valid.

Your answer is correct.

Question **2**
Correct
Mark 1.00 out of 1.00
Flag question

The following CREATE statement for the Lab9_Monitors table is suggested as the solution for Task 3. Which ONE of the following options is correct in relation to the SQL code below.

```
CREATE Table Lab9_Monitors(

    EIONetCode TEXT NOT NULL ON UPDATE CASCADE ON DELETE CASCADE,

    EEAPol INTEGER NOT NULL References Lab9_Pollutant (EEAPol) ON UPDATE CASCADE ON DELETE CASCADE,

    CONSTRAINT Lab9_Monitors_PKEY PRIMARY KEY (EIONetCode,EEAPol)

);
```

Select one:

- a. The composite primary key suggested will not be unique under all circumstances.
- b. There is no REFERENCE to the Lab9_Stations table. This will cause an error. ✔
- c. There is a REFERENCE to the Lab9_Monitors table. This will cause an error.
- d. The ordering of the columns in the Lab9_Monitors table is incorrect.
- e. The SQL provided will create the Lab9_Monitors table as required in CS130 Lab 9.

Your answer is correct.

Question **3**
Correct
Mark 1.00 out of 1.00
Flag question

How many INSERT statements are required to populate the Lab9_Monitors table BEFORE you answered CS130 Lab 9 Question 1?

Answer: 26 ✔

Question **4**
Not answered
Marked out of 1.00
Flag question

How many rows are returned by the query in CS130 Lab 9 Question 1?

Answer: ✖

Question 5
Incorrect
Mark 0.00 out of 1.00
Flag question

When writing the CREATE statements for all of the tables in CS130 Lab 9 - Should we use the SERIAL data type as an artificial primary key in the tables? Which ONE of the following is TRUE?

Select one:

a. None of these options are true.
b. We cannot use SERIAL primary keys in joined tables.
c. The assessment outline clearly states that the EIONetCode and the Pollutant Code are unique all over Europe. Therefore, this is a naturally occurring primary key in this problem definition. These can serve as primary keys.
d. We should use the SERIAL data type - it is not clear, from the data tables provided, if there will be duplicates or not.
e. We cannot use the SERIAL data type as we would not be able to use it in the JOIN table. ✖

Your answer is incorrect.

Question 6
Correct
Mark 1.00 out of 1.00
Flag question

After creating all of the tables in CS130 Lab 9 what does the following query actually do? Which ONE of the following is the correct and expected output?

```
SELECT Lab9_Station.EIONetCode,Lab9_Station.Station,Lab9_Station.Status,Lab9_Pollutant.EEAPol,Lab9_Pollutant.Pollutant

FROM Lab9_Station,Lab9_Monitors,Lab9_Pollutant

where (Lab9_Station.EIONetCode = Lab9_Monitors.EIONetCode) and (Lab9_Pollutant.EEAPol = Lab9_Monitors.EEAPol);
```

Select one:

a. This query performs a CARTESIAN PRODUCT between the three tables Lab9_Pollutant, Lab9_Station,Lab9_Monitors
b. This query performs a SELECT query of the Lab9_Monitors table. The output indicates a listing of the contents of the Lab9_Station and Lab9_Pollutant table.
c. None of these answers are correct.
d. This query performs a JOIN query between the three tables Lab9_Pollutant, Lab9_Station,Lab9_Monitors. The output indicates which pollutants **are monitored** at each station in our database. ✔
e. This query performs a JOIN query between the three tables Lab9_Pollutant, Lab9_Station,Lab9_Monitors. The output indicates which pollutants **are not monitored** at each station in our database.

Your answer is correct.