CS 327E Class 2

September 16, 2019
1) Which is **not** a Data Manipulation Language construct?

a) CREATE  
b) SELECT  
c) INSERT  
d) UPDATE
2) How many fields does this query return?

SELECT group FROM ACL_Lineup_2019

ACL_Lineup_2019

<table>
<thead>
<tr>
<th>id</th>
<th>group</th>
<th>genre</th>
<th>date</th>
<th>venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Guns N' Roses</td>
<td>Heavy Metal</td>
<td>2019-10-04</td>
<td>American Express</td>
</tr>
<tr>
<td>82</td>
<td>The Cure</td>
<td>Gothic Rock</td>
<td>2019-10-05</td>
<td>Honda</td>
</tr>
<tr>
<td>79</td>
<td>21 Savage</td>
<td>Hip Hop</td>
<td>2019-10-05</td>
<td>T-Mobile</td>
</tr>
<tr>
<td>43</td>
<td>Asleep At The Wheel</td>
<td>Country</td>
<td>2019-10-04</td>
<td>Honda</td>
</tr>
</tbody>
</table>

a) 5
b) 4
c) 1
d) 0
3) How many records does this query return?

SELECT * FROM ACL_Lineup_2019
WHERE date = '2019-10-04'

<table>
<thead>
<tr>
<th>id</th>
<th>group</th>
<th>genre</th>
<th>date</th>
<th>venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Guns N' Roses</td>
<td>Heavy Metal</td>
<td>2019-10-04</td>
<td>American Express</td>
</tr>
<tr>
<td>82</td>
<td>The Cure</td>
<td>Gothic Rock</td>
<td>2019-10-05</td>
<td>Honda</td>
</tr>
<tr>
<td>79</td>
<td>21 Savage</td>
<td>Hip Hop</td>
<td>2019-10-05</td>
<td>T-Mobile</td>
</tr>
<tr>
<td>43</td>
<td>Asleep At The Wheel</td>
<td>Country</td>
<td>2019-10-04</td>
<td>Honda</td>
</tr>
</tbody>
</table>
4) How many records does this query return?

```
SELECT count(*) FROM ACL_Lineup_2019
WHERE genre = 'Hip Hop'
AND date = '2019-10-04'
```

ACL_Lineup_2019

<table>
<thead>
<tr>
<th>id</th>
<th>group</th>
<th>genre</th>
<th>date</th>
<th>venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Guns N' Roses</td>
<td>Heavy Metal</td>
<td>2019-10-04</td>
<td>American Express</td>
</tr>
<tr>
<td>82</td>
<td>The Cure</td>
<td>Gothic Rock</td>
<td>2019-10-05</td>
<td>Honda</td>
</tr>
<tr>
<td>79</td>
<td>21 Savage</td>
<td>Hip Hop</td>
<td>2019-10-05</td>
<td>T-Mobile</td>
</tr>
<tr>
<td>43</td>
<td>Asleep At The Wheel</td>
<td>Country</td>
<td>2019-10-04</td>
<td>Honda</td>
</tr>
</tbody>
</table>

a) 5
b) 4
c) 2
d) 0
5) Why can it be challenging to embed DML statements into an OO program (e.g. python, java, etc.)?

a) Datatype differences
b) Naming convention differences
c) Access differences
d) None of the above
SQL Queries: Basic Form

SELECT <list of desired fields>
FROM <single table>
WHERE <boolean condition>
SQL Queries: Basic Form

```
SELECT <list of desired fields>
FROM <single table>
WHERE <boolean condition>
ORDER BY <list of fields to sort on>
```
Demo: Table Creation
Staging Schema

Current_Student(sid, fname, lname, dob, cno, cname, credits, grade)
New_Student(sid, fname, lname, dob)
Class(tid, instructor, dept, cno, cname, credits)
First Question

Who takes CS327E or CS329E?

Current_Student(sid, fname, lname, dob, cno, cname, credits, grade)
New_Student(sid, fname, lname, dob)
Class(tid, instructor, dept, cno, cname, credits)
iClicker Question

*Who takes CS327E or CS329E?*

How many records does the answer return?

A. 5  
B. 6  
C. 7
Second Question

Who takes CS327E and CS329E?

Current_Student(sid, fname, lname, dob, cno, cname, credits, grade)
New_Student(sid, fname, lname, dob)
Class(tid, instructor, dept, cno, cname, credits)
Who takes CS327E and CS329E?

Is this query a correct implementation?

SELECT sid
FROM Current_Student
WHERE cno = 'CS327E'
  AND cno = 'CS329E'

A. Yes
B. No
Demo: Public Datasets and Import Errors
Milestone 2

http://www.cs.utexas.edu/~scohen/milestones/Milestone2.pdf