CS 327E Class 2

Feb 03, 2020

1) Which statement is/are correct?

Statement A: An OLTP system is able to cope with real-time, simultaneous transactions that the database server is processing in large volumes.

Statement B: An OLAP system uses large amounts of operational data to run complex queries on and provide insights for tactical and strategic decision-making.

a) Only A   b) Only B   c) A and B   d) Neither A or B

```
SELECT count(*) FROM Oscar_Nominations
WHERE length BETWEEN 200 AND 230
```

Oscar_Nominations

id	title	director	length
20	1917	Sam Mendes	159
21	The Ishman	Martin Scorsece	329
25	Little Women	Greta Gerwig	215
28	Joker	Todd Philipps	202
32	Jojo Rabbit	Taika Waititi	148
60	Marriage Story	Noah Baumbach	

2) What is the output from the query?

a) 3
b) 2
c) 5
d) 0

```
SELECT count(*) FROM Oscar_Nominations
WHERE length < 200 AND length > 230
```

Oscar_Nominations

id	title	director	length
20	1917	Sam Mendes	159
21	The Ishman	Martin Scorsece	329
25	Little Women	Greta Gerwig	215
28	Joker	Todd Philipps	202
32	Jojo Rabbit	Taika Waititi	148
60	Marriage Story	Noah Baumbach	

3) What is the output from the query?

a) 3
b) 2
c) 5
d) 0

```
SELECT count(*) FROM Oscar_Nominations
WHERE length IS NULL
```

Oscar_Nominations

id	title	director	length
20	1917	Sam Mendes	159
21	The Ishman	Martin Scorsece	329
25	Little Women	Greta Gerwig	215
28	Joker	Todd Philipps	202
32	Jojo Rabbit	Taika Waititi	148
60	Marriage Story	Noah Baumbach	

4) What is the output from the query?

a) 3
b) 2
c) 1
d) 0

```
SELECT count(*) FROM Oscar_Nominations
WHERE length > 100
```

Oscar_Nominations

id	title	director	length
20	1917	Sam Mendes	159
21	The Ishman	Martin Scorsece	329
25	Little Women	Greta Gerwig	215
28	Joker	Todd Philipps	202
32	Jojo Rabbit	Taika Waititi	148
60	Marriage Story	Noah Baumbach	

5) What is the output from the query?

a) 3
b) 2
c) 5
d) 6

SQL Queries: Basic Form

```
SELECT <list of desired fields>
FROM <single table>
WHERE <boolean condition>
ORDER BY <list of fields to sort on>
```

Demo: Data Ingest - Part 1

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)

iClicker Question

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: Data Ingest - Part 2

Milestone 2

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