## Module 2 - Data Manipulation, Constraints, ...          100% (10/10)

✓ 1.  **What type of constraint ensures values in a column must reference an existing record in another table?**

  (A)  Primary Key

  **(B)  Foreign Key**

  (C)  Check Constraint

  (D)  Not Null Constraint

  (E)  Unique Constraint

  (F)  I don't know


✓ 2.  **True or False?**

  **A Primary Key field cannot contain a null value.**

  **(A)  True**

  (B)  False

  (C)  I don't know


✓ 3.  **True or False?**

  **A Foreign Key column cannot contain the same value in more than one row (i.e. values must be unique).**

  (A)  True

  **(B)  False**

  (C)  I don't know


✓ 4.  **INSERT INTO person ( person_id, last_name, middle_name, first_name ) VALUES ( 100, 'Thoreau', 'Henry', 'David' );**

  **SELECT first_name FROM person WHERE person_id = 100;**

  **What value would be returned by the SELECT statement?**

  (A)  Henry

  **(B)  David**

  (C)  Thoreau

  (D)  I don't know

✓ 5.  INSERT INTO person ( person_id, first_name, middle_name, last_name )
VALUES ( 101, 'Emerson', 'Ralph', 'Waldo' );

SELECT first_name
FROM person
WHERE person_id = 101;

**What value would be returned by the SELECT statement?**

- (A)  Ralph
- (B)  Waldo
- (C)  Emerson
- (D)  I don't know

✓ 6.  **Assume the data pictured was stored in a table named "president".**

**How many rows would be left in the table after the following statement was run?**

DELETE FROM president;

0

| FIRST_NAME | LAST_NAME | NUMBER | TERM_BEGIN | TERM_END |
|---|---|---|---|---|
| George | Washington | 1 | 1789-04-30 | 1797-03-04 |
| John | Adams | 2 | 1797-03-04 | 1801-03-04 |
| Thomas | Jefferson | 3 | 1801-03-04 | 1809-03-04 |
| James | Madison | 4 | 1809-03-04 | 1817-03-04 |
| James | Monroe | 5 | 1817-03-04 | 1825-03-04 |

✓ 7.  **Assume the data pictured was stored in a table named "president".**

**How many rows would be left in the table after the following statement was run?**

DELETE FROM president
WHERE first_name LIKE 'J%';

2

| FIRST_NAME | LAST_NAME | NUMBER | TERM_BEGIN | TERM_END |
|---|---|---|---|---|
| George | Washington | 1 | 1789-04-30 | 1797-03-04 |
| John | Adams | 2 | 1797-03-04 | 1801-03-04 |
| Thomas | Jefferson | 3 | 1801-03-04 | 1809-03-04 |
| James | Madison | 4 | 1809-03-04 | 1817-03-04 |
| James | Monroe | 5 | 1817-03-04 | 1825-03-04 |

✓ 8.  **Assume the data pictured was stored in a table named "president".**

**If the following UPDATE statement were run:**

UPDATE president
SET first_name = 'Jim'
WHERE first_name = 'James'
AND number < 5;

**What value would be returned by the following SELECT statement?**

SELECT first_name
FROM president
WHERE last_name = 'Monroe';

James

| FIRST_NAME | LAST_NAME | NUMBER | TERM_BEGIN | TERM_END |
|---|---|---|---|---|
| George | Washington | 1 | 1789-04-30 | 1797-03-04 |
| John | Adams | 2 | 1797-03-04 | 1801-03-04 |
| Thomas | Jefferson | 3 | 1801-03-04 | 1809-03-04 |
| James | Madison | 4 | 1809-03-04 | 1817-03-04 |
| James | Monroe | 5 | 1817-03-04 | 1825-03-04 |

✓ 9.  **Assume the data pictured was stored in a table named "president".**

**If the following UPDATE statement were run:**

UPDATE president
SET number = number * 2;

**What value would be returned by the following SELECT statement?**

SELECT last_name
FROM president
WHERE number = 4;

Adams

| FIRST_NAME | LAST_NAME | NUMBER | TERM_BEGIN | TERM_END |
|---|---|---|---|---|
| George | Washington | 1 | 1789-04-30 | 1797-03-04 |
| John | Adams | 2 | 1797-03-04 | 1801-03-04 |
| Thomas | Jefferson | 3 | 1801-03-04 | 1809-03-04 |
| James | Madison | 4 | 1809-03-04 | 1817-03-04 |
| James | Monroe | 5 | 1817-03-04 | 1825-03-04 |

✓ 10.  **Assume the data pictured was stored in a table named "president".**

**If the following series of statements were run:**

BEGIN TRANSACTION;

UPDATE president
SET number = number * 2;

ROLLBACK;

**What value would be returned by the following SELECT statement?**

SELECT last_name
FROM president
WHERE number = 4;

Madison

| FIRST_NAME | LAST_NAME | NUMBER | TERM_BEGIN | TERM_END |
|---|---|---|---|---|
| George | Washington | 1 | 1789-04-30 | 1797-03-04 |
| John | Adams | 2 | 1797-03-04 | 1801-03-04 |
| Thomas | Jefferson | 3 | 1801-03-04 | 1809-03-04 |
| James | Madison | 4 | 1809-03-04 | 1817-03-04 |
| James | Monroe | 5 | 1817-03-04 | 1825-03-04 |