5.Data Types , Operatores , Case(when then else)

```
CREATE TABLE inventory (
    item_name VARCHAR(100),
    price DECIMAL(8,2),
    quantity INT
);
```

What's the difference between DATETIME and TIMESTAMP?

They both store datetime information, but there's a difference in the range,
TIMESTAMP has a smaller range. TIMESTAMP also takes up less space.
TIMESTAMP is used for things like meta-data about when something is created
or updated.

```
SELECT CURTIME();

SELECT CURDATE()';

SELECT DAYOFWEEK(CURDATE());
SELECT DAYOFWEEK(NOW());
SELECT DATE_FORMAT(NOW(), '%w') + 1;

SELECT DAYNAME(NOW());
SELECT DATE_FORMAT(NOW(), '%W');

SELECT DATE_FORMAT(CURDATE(), '%m/%d/%Y'');

SELECT DATE_FORMAT(NOW(), '%M %D at %h:%i');

CREATE TABLE tweets(
    content VARCHAR(140),
    username VARCHAR(20),
    created_at TIMESTAMP DEFAULT NOW()
);

INSERT INTO tweets (content, username) VALUES('this is my first tweet',
'coltscat');
SELECT * FROM tweets;

INSERT INTO tweets (content, username) VALUES('this is my second tweet',
'coltscat');
SELECT * FROM tweets;
```

```sql
SELECT 10 != 10;
-- false

SELECT 15 > 14 && 99 - 5 <= 94;
-- true

SELECT 1 IN (5,3) || 9 BETWEEN 8 AND 10;
-- true

SELECT title, released_year FROM books WHERE released_year < 1980;

SELECT title, author_lname FROM books WHERE author_lname='Eggers' OR
author_lname='Chabon';

SELECT title, author_lname FROM books WHERE author_lname IN
('Eggers','Chabon');

SELECT title, author_lname, released_year FROM books WHERE author_lname =
'Lahiri' && released_year > 2000;

SELECT title, pages FROM books WHERE pages >= 100 && pages <=200;

SELECT title, pages FROM books WHERE pages BETWEEN 100 AND 200;

SELECT
    title,
    author_lname
FROM books
WHERE
    author_lname LIKE 'C%' OR
    author_lname LIKE 'S%';

SELECT
    title,
    author_lname
FROM books
WHERE
    SUBSTR(author_lname,1,1) = 'C' OR
    SUBSTR(author_lname,1,1) = 'S';

SELECT title, author_lname FROM books
WHERE SUBSTR(author_lname,1,1) IN ('C', 'S');

SELECT
    title,
    author_lname,
    CASE
        WHEN title LIKE '%stories%' THEN 'Short Stories'
        WHEN title = 'Just Kids' OR title = 'A Heartbreaking Work of
Staggering Genius' THEN 'Memoir'
        ELSE 'Novel'
    END AS TYPE
```

```
FROM books;

SELECT author_fname, author_lname,
    CASE
        WHEN COUNT(*) = 1 THEN '1 book'
        ELSE CONCAT(COUNT(*), ' books')
    END AS COUNT
FROM books
GROUP BY author_lname, author_fname;
```