# SQL\_4\_Data\_types\_exercise

## Exercise 1 — What’s a good use case for CHAR()?

CHAR is best for fixed-length text data — values that always have the same length.  
Examples include:  
- U.S. state abbreviations (e.g., 'CA', 'NY')  
- ZIP codes (e.g., '94110')  
- Yes/No flags ('Y', 'N')  
- Years ('2025')  
  
CHAR is more efficient than VARCHAR when data length is fixed.

## Exercise 2 — Fill in the Blanks

Create a table named inventory that includes:  
- item\_name (text, variable length)  
- price (always less than 1,000,000, with two decimals)  
- quantity (whole number, non-negative)  
  
Model Answer:  
CREATE TABLE inventory (  
 item\_name VARCHAR(50),  
 price DECIMAL(7,2),  
 quantity INT UNSIGNED  
);

## Exercise 3 — What’s the difference between DATETIME and TIMESTAMP?

Both store date and time together, but they differ in:  
| Feature | DATETIME | TIMESTAMP |  
|----------|-----------|-----------|  
| Range | Year 1000–9999 | Year 1970–2038 |  
| Storage | 8 bytes | 4 bytes |  
| Memory | Larger | Smaller |  
| Behavior | Manual insert/update | Can auto-update on change |  
  
TIMESTAMP is more memory-efficient and can auto-update (e.g., record 'last updated' time).

## Exercise 4 — Print Out the Current Time

SELECT CURTIME();  
-- or  
SELECT CURRENT\_TIME();

## Exercise 5 — Print Out the Current Date

SELECT CURDATE();  
-- or  
SELECT CURRENT\_DATE();

## Exercise 6 — Print Out the Current Day of the Week (Number)

SELECT DAYOFWEEK(CURDATE());  
-- or  
SELECT DATE\_FORMAT(CURDATE(), '%w');

## Exercise 7 — Print Out the Current Day of the Week (Name)

SELECT DAYNAME(CURDATE());  
-- or  
SELECT DATE\_FORMAT(CURDATE(), '%W');

## Exercise 8 — Print the Current Day and Time (Format: mm/dd/yyyy)

SELECT DATE\_FORMAT(NOW(), '%m/%d/%Y');

## Exercise 9 — Print the Current Day and Time (Format: January 2nd at 3:15)

SELECT DATE\_FORMAT(NOW(), '%M %D at %k:%i');

## Exercise 10 — Create a Tweets Table

CREATE TABLE tweets (  
 tweet\_content VARCHAR(150),  
 username VARCHAR(20),  
 created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP  
);  
  
INSERT INTO tweets (tweet\_content, username)  
VALUES ('This is my first tweet lol', 'coltsteel');  
  
SELECT \* FROM tweets;