

# CODE: CHAR and VARCHAR

## Section 10, Lecture 153

```
CREATE TABLE dogs (name CHAR(5), breed VARCHAR(10));
```

```
INSERT INTO dogs (name, breed) VALUES ('bob', 'beagle');
```

```
INSERT INTO dogs (name, breed) VALUES ('robby', 'corgi');
```

```
INSERT INTO dogs (name, breed) VALUES ('Princess Jane', 'Retriever');
```

```
SELECT * FROM dogs;
```

```
INSERT INTO dogs (name, breed) VALUES ('Princess Jane', 'Retrievesadfdsafdasfsafr');
```

```
SELECT * FROM dogs;
```

# CODE: DECIMAL

## Section 10, Lecture 155

```
CREATE TABLE items(price DECIMAL(5,2));

INSERT INTO items(price) VALUES(7);

INSERT INTO items(price) VALUES(7987654);

INSERT INTO items(price) VALUES(34.88);

INSERT INTO items(price) VALUES(34.2989999);

INSERT INTO items(price) VALUES(1.9999);

SELECT * FROM items;
```

# CODE: FLOAT and DOUBLE

## Section 10, Lecture 157

```
CREATE TABLE thingies (price FLOAT);
```

```
INSERT INTO thingies(price) VALUES (88.45);
```

```
SELECT * FROM thingies;
```

```
INSERT INTO thingies(price) VALUES (8877.45);
```

```
SELECT * FROM thingies;
```

```
INSERT INTO thingies(price) VALUES (8877665544.45);
```

```
SELECT * FROM thingies;
```

# CODE: Creating Our DATE data

## Section 10, Lecture 160

```
CREATE TABLE people (name VARCHAR(100), birthdate DATE, birthtime TIME, birthdt DATETIME);
```

```
INSERT INTO people (name, birthdate, birthtime, birthdt)  
VALUES('Padma', '1983-11-11', '10:07:35', '1983-11-11 10:07:35');
```

```
INSERT INTO people (name, birthdate, birthtime, birthdt)  
VALUES('Larry', '1943-12-25', '04:10:42', '1943-12-25 04:10:42');
```

```
SELECT * FROM people;
```

# CODE: Formatting Dates

## Section 10, Lecture 163

```
SELECT name, birthdate FROM people;
```

```
SELECT name, DAY(birthdate) FROM people;
```

```
SELECT name, birthdate, DAY(birthdate) FROM people;
```

```
SELECT name, birthdate, DAYNAME(birthdate) FROM people;
```

```
SELECT name, birthdate, DAYOFWEEK(birthdate) FROM people;
```

```
SELECT name, birthdate, DAYOFYEAR(birthdate) FROM people;
```

```
SELECT name, birthtime, DAYOFYEAR(birthtime) FROM people;
```

```
SELECT name, birthdt, DAYOFYEAR(birthdt) FROM people;
```

```
SELECT name, birthdt, MONTH(birthdt) FROM people;
```

```
SELECT name, birthdt, MONTHNAME(birthdt) FROM people;
```

```
SELECT name, birthtime, HOUR(birthtime) FROM people;
```

```
SELECT name, birthtime, MINUTE(birthtime) FROM people;
```

```
SELECT CONCAT(MONTHNAME(birthdate), ' ', DAY(birthdate), ' ', YEAR(birthdate)) FROM people;
```

```
SELECT DATE_FORMAT(birthdt, 'Was born on a %W') FROM people;
```

```
SELECT DATE_FORMAT(birthdt, '%m/%d/%Y') FROM people;
```

```
SELECT DATE_FORMAT(birthdt, '%m/%d/%Y at %h:%i') FROM people;
```

# CODE: Date Math

## Section 10, Lecture 165

```
SELECT * FROM people;
```

```
SELECT DATEDIFF(NOW(), birthdate) FROM people;
```

```
SELECT name, birthdate, DATEDIFF(NOW(), birthdate) FROM people;
```

```
SELECT birthdt FROM people;
```

```
SELECT birthdt, DATE_ADD(birthdt, INTERVAL 1 MONTH) FROM people;
```

```
SELECT birthdt, DATE_ADD(birthdt, INTERVAL 10 SECOND) FROM people;
```

```
SELECT birthdt, DATE_ADD(birthdt, INTERVAL 3 QUARTER) FROM people;
```

```
SELECT birthdt, birthdt + INTERVAL 1 MONTH FROM people;
```

```
SELECT birthdt, birthdt - INTERVAL 5 MONTH FROM people;
```

```
SELECT birthdt, birthdt + INTERVAL 15 MONTH + INTERVAL 10 HOUR FROM people;
```

# CODE: Working with TIMESTAMPS

## Section 10, Lecture 167

```
CREATE TABLE comments (  
    content VARCHAR(100),  
    created_at TIMESTAMP DEFAULT NOW()  
);  
  
INSERT INTO comments (content) VALUES('lol what a funny article');  
  
INSERT INTO comments (content) VALUES('I found this offensive');  
  
INSERT INTO comments (content) VALUES('Ifasfsadfsadfsad');  
  
SELECT * FROM comments ORDER BY created_at DESC;  
  
CREATE TABLE comments2 (  
    content VARCHAR(100),  
    changed_at TIMESTAMP DEFAULT NOW() ON UPDATE CURRENT_TIMESTAMP  
);  
  
INSERT INTO comments2 (content) VALUES('dasdasdasd');  
  
INSERT INTO comments2 (content) VALUES('lololololo');  
  
INSERT INTO comments2 (content) VALUES('I LIKE CATS AND DOGS');  
  
UPDATE comments2 SET content='THIS IS NOT GIBBERISH' WHERE content='dasdasdasd';  
  
SELECT * FROM comments2;  
  
SELECT * FROM comments2 ORDER BY changed_at;  
  
CREATE TABLE comments2 (  
    content VARCHAR(100),  
    changed_at TIMESTAMP DEFAULT NOW() ON UPDATE NOW()  
);
```

# CODE: Data Types Exercises Solution

## Section 10, Lecture 170

What's a good use case for CHAR?

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Used for text that we know has a fixed length, e.g., State abbreviations, abbreviated company names, sex M/F, etc.

```
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;
```