

Lesson 7 - SQL SELECT I

Recall from last lecture,

Selecting data

Select all columns.

```
SELECT *  
FROM contacts;
```

Select single column.

```
SELECT first_name  
FROM contacts;
```

Select multiple columns.

```
SELECT first_name, phone_number  
FROM contacts;
```

Selecting based on a condition

Select all contacts who have children.

```
SELECT *  
FROM contacts  
WHERE number_of_children > 0;
```

```
SELECT first_name, last_name, phone_number  
FROM contacts  
WHERE first_name = 'Muhammad';
```

Selecting based on multiple conditions

When both conditions **MUST** be true.

```
SELECT first_name, last_name, phone_number
FROM contacts
WHERE first_name = 'Muhammad' AND number_of_children > 0;
```

When **ANY** condition can be true.

```
SELECT *
FROM contacts
WHERE first_name = 'Muhammad' OR number_of_children > 0;
```

When we want the opposite of a condition.

```
SELECT *
FROM contacts
WHERE NOT first_name = 'Muhammad';
```

Combining Operators

```
SELECT *
FROM contacts
WHERE NOT number_of_children = 1 AND
      NOT first_name = 'Muhammad';
```

What about Null values?

```
SELECT *
FROM contacts
WHERE last_name IS NULL;
```

```
SELECT *
FROM contacts
WHERE last_name IS NOT NULL;
```

SQL Functions

```
SELECT COUNT(*)
FROM contacts
WHERE last_name IS NULL;
```

```
SELECT SUM(number_of_children)
FROM contacts;
```

```
SELECT COUNT(*)
FROM contacts
```

```
WHERE number_of_children IS NOT NULL  
      AND number_of_children > 0;
```