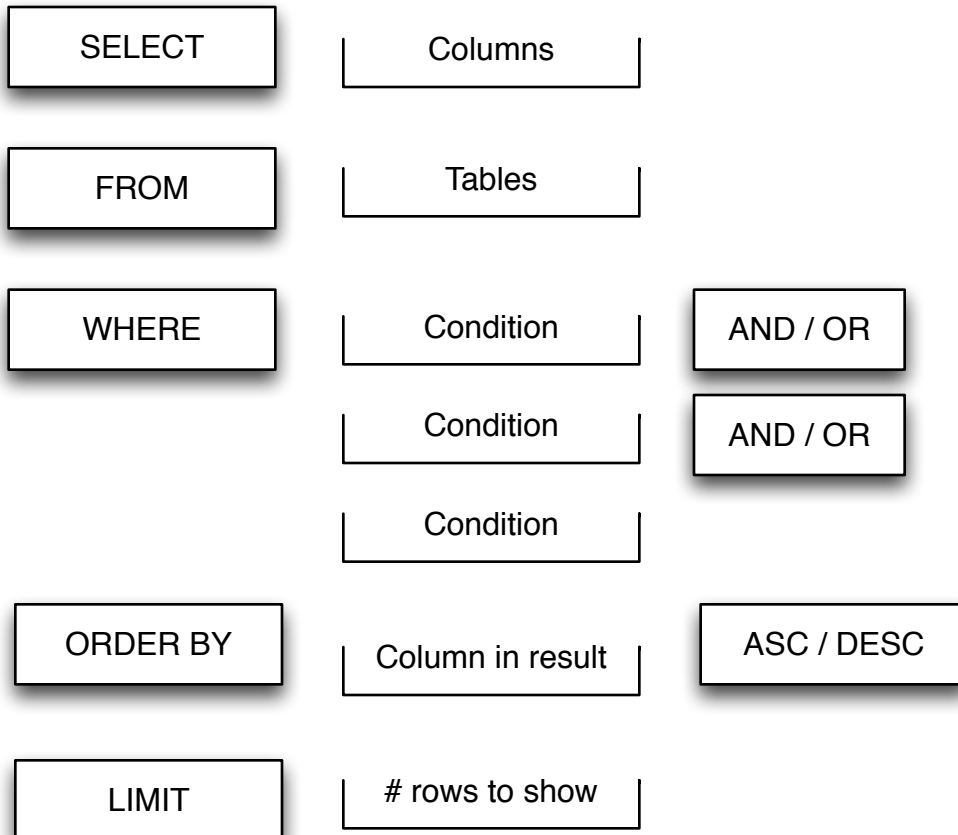
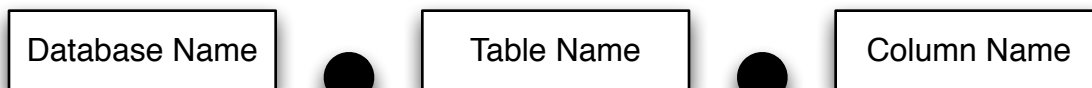


Anatomy of a Query



Full name for columns

The full name for a column has three parts, separated by periods.
Each part could include underscores.



`class_mtcars.cars.mpg`

`class_bookstore_solution.books.name`

We very rarely have to include the Database Name, since we tell phpmyadmin which database we're using. It does show up in error messages, though. If there's only one table in the query, then just using the Column name will work.

Building a query up, step by step

What is the model name of the most efficient four-cylinder car sized between 200 and 300 displacement?

```
SELECT *  
FROM cars
```

*Always start with SELECT *, find the right table*

```
SELECT *  
FROM cars  
WHERE cars.cyl > 4
```

Get one condition working

```
SELECT *  
FROM cars  
WHERE cars.cyl > 4    AND  
      cars.disp > 200 AND  
      cars.disp < 300
```

Add more conditions, one per line.

```
SELECT *  
FROM cars  
WHERE cars.cyl > 4    AND  
      cars.disp > 200 AND  
      cars.disp < 300  
ORDER BY mpg DESC
```

*When you have just the rows that you want, ORDER the results. Using SELECT * here lets you check that the ordering worked out as you thought.*

```
SELECT *  
FROM cars  
WHERE cars.cyl > 4    AND  
      cars.disp > 200 AND  
      cars.disp < 300  
ORDER BY mpg DESC  
LIMIT 1
```

Now use LIMIT to only see the top row.

```
SELECT cars.model  
FROM cars  
WHERE cars.cyl > 4    AND  
      cars.disp > 200 AND  
      cars.disp < 300  
ORDER BY mpg DESC  
LIMIT 1
```

Finally, right at the end, narrow to the columns you want to see.