Lecture 3

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List all cities of people who were born in Ireland

1. Which table will have our data?

   ```
   People
   ```

2. Which attributes do we want?

   ```
   birthCity
   ```

3. What is our filter?

   ```
   birthCountry = 'Ireland'
   ```

```
select birthCity where birthCountry = 'Irealnd';
```

To remove duplicates

```
select distinct ...
```

This will treat `null` as all the same value, even though `null != null`

List all playerId's and the total bases for each batter with at least 600 at bats in 2018

1. Which table will have our data? Batting

2. Which attributes do we want?

   ```
   playerId, yearId, H + 2b + 2 * 3b + 3 * hr
   ```

3. What is our filter?

   ```
   Ab >= 600
   ```

```
select playerId, H + 2b + 2 * 3b + 3 * hr,
from batting
where abs >= 600
and yearId = 2018;
```

String operations

Find first and last names of people ...

```
select concat(nameFirst,' ',nameLast) as fullName
```

Wildcards

```
select nameFirst from People where nameLast like "%son";
```

Date Operations

Find the number of days a person played

```
select datediff(finalGame, debut) ...
```

or

```
select ... where datediff(finalGame, debut) > 100;
```

It can be used in either instance.

If statements

Find batting averages of all players on 2018 Tigers

1. Batting
2. h / ab
3. yearid = 2018 and teamId = 'DET'

```
select case when h/ab  is null then 0.000 else h/ab end ...
```

or

```
select coalesce(h/ab, 0) ...
```