

# Lesson notes - basic project complete!

Well done on completing the basic dbt project! So far, we've made 3 staging models, 1 intermediate model, and 1 mart model. We've also added some basic out of the box dbt tests - `not_null`, `unique`, `accepted_values`, and `relationships`.

If you want to do a full run (drop and replace the tables in BigQuery) then you will want to:

1. Clean and reinstall dbt packages. **This isn't mandatory every time you run dbt!** Just the first time, or if you change your packages

```
dbt clean && dbt deps
```

2. Run **all** of your models

```
dbt run
```

You can select specific models, e.g. `dbt run -s stg_ecommerce__orders`. Remember, dbt will fail if you run a model containing a `{{ ref() }}` where the table hasn't been created in BigQuery. For example, if I ran `dbt run -s orders` and I hadn't created any of the tables it depended on - then it would fail!

3. Run **all** of your tests

```
dbt test
```

Again, you can use the selector `-s` to pick which model to test, or just test everything.

### A side note on dbt build

A nice tip here, that we'll run through later on in our course, is if you use `dbt build` then it will perform a `dbt run && dbt test` **on each model individually** before moving on to the next model downstream.

For example, `dbt run -s stg_ecommerce__products int_ecommerce__order_items_products` followed by `dbt test -s stg_ecommerce__products int_ecommerce__order_items_products` would, in order:

- Run `stg_ecommerce__products` first
- Run `int_ecommerce__order_items_products`, as it depends on `stg_ecommerce__products`
- Test `stg_ecommerce__products`
- Test `int_ecommerce__order_items_products`

Whereas if you instead did `dbt build -s stg_ecommerce__products int_ecommerce__order_items_products` it would:

- Run `stg_ecommerce__products` first
- **Test** `stg_ecommerce__products`
- Run `int_ecommerce__order_items_products`, as it depends on `stg_ecommerce__products`
- Test `int_ecommerce__order_items_products`

If we instead did `dbt build` on 2 models that weren't dependent on one another, such as

`stg_ecommerce__products` and `stg_ecommerce__orders`, it would run them in **parallel** then test them in **parallel**.