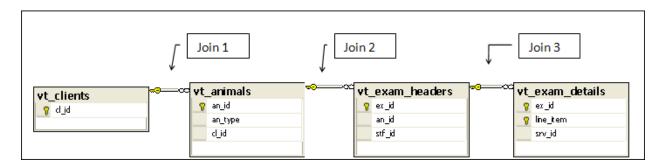
## Join chains

Suppose we have a From clause that uses these four tables: We have a straight line join between these tables in the table diagram.



And we can code that in a straight line. We could start at either end of the chain since this is an inner join.

```
from vt_clients CL
join vt_animals AN on CL.cl_id = AN.cl_id
join vt_exam_headers EH on EH.an_id = AN.an_id
join vt exam details ED on EH.ex id = ED.ex id
```

## We could do the following join and it would work.

```
from vt_animals AN
join vt_exam_headers EH on EH.an_id = AN.an_id
join vt_clients CL on CL.cl_id = AN.cl_id
join vt exam details ED on EH.ex id = ED.ex id
```

But a diagram of that join order is a tangled mess. This looks like you wanted some data from the animals table so you put that in the From clause, then you needed the exam date so you added the exam headers table. Now you remember that you need the clients name so you stuck in the clients table and then you needed to filter on the exam fee so now you figured out you needed the exam details table. The join and the diagram reflect an unorganized approach to this. Maybe you started that way but you do not have to end up looking that bad.

