$\qquad$

## Quiz 4 Answers

Vacation Car International ("VCI") is a car rental agencies with offices in several cities around the globe. VCI maintains a database that it uses to keep track of orders and related information. Here are two of the tables in the database, described using the SQL code that was used to create them:

```
create table vehicle_type (
    type_id integer autō increment,
    description varchar(100), -- e.g. "compact 2- or 4-door"
    air_conditioning boolean, -- does it have air conditioning
    transmission enum("automatic", "manual"), -- automatic or manual transmission
    primary key (type_id)
);
create table booking ( -- call it "booking" since "order" is an SQL keyword
    order_id integer auto_increment,
    customer_id integer,
    car_type_id integer,
    sta\overline{rt_da\overline{Te date,}}\mathbf{},\mathrm{ ,}
    end_date date,
    primary key (order_id),
    foreign key (customer_id) references customer(customer_id),
    foreign key (car_type_id) references vehicle_type(type_id)
);
```

Please write a query that answers the following question: For bookings that start in November of 2011, how many are for automatic cars with air conditioning and how many are for manual cars with air conditioning? The result should show the numbers for automatic and manual cars separately, like this:

```
+-------------+-------+
| automatic | 12731 |
| manual | 2195 |
+------------+---------
```

The solution:

```
select vehicle_type.transmission, count(*)
from vehicle_type
join booking
    on booking.car_type_id=vehicle_type.type_id
where booking.start_date >= "2011-1\overline{1}-01"
    and booking.start_date < "2011-12-01"
    and vehicle_type.air_conditioning=True
group by vehicle_type.transmission;
```

Please note that "enum("automatic","manual")" is a data type. "Enum" is not a part of the field name.
(your answer probably shouldn't go past this point)

