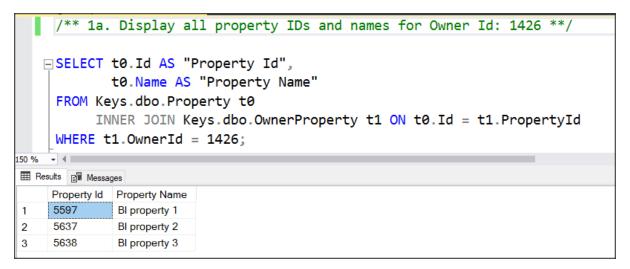
## **Property Analysis BI Developer - Onboarding Task**

1a.



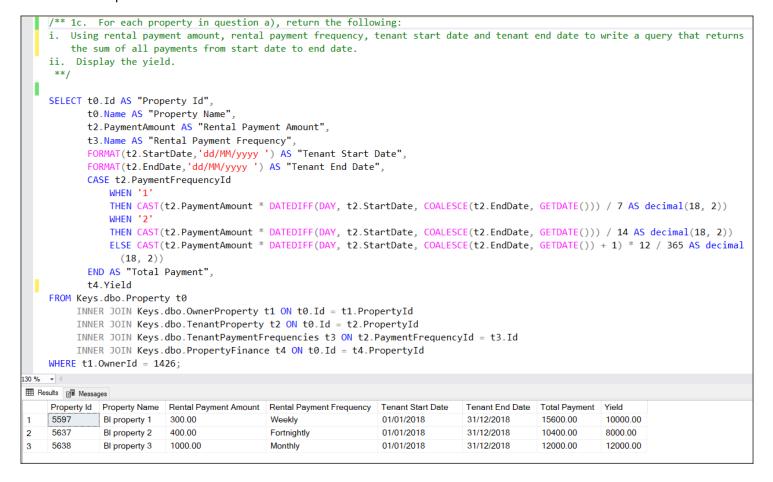
1b. To get current home value, PropertyHomeValue.IsActive = 1.

```
/** 1b. Display the current home value for each property **/
     SELECT t0.Id AS "Property Id",
             t0.Name AS "Property Name",
             t2. Value AS "Current Home Value"
     FROM Keys.dbo.Property t0
           INNER JOIN Keys.dbo.OwnerProperty t1 ON t0.Id = t1.PropertyId
           INNER JOIN Keys.dbo.PropertyHomeValue t2 ON t0.Id = t2.PropertyId
     WHERE t1.OwnerId = 1426
            AND t2.IsActive = 1;
150 % → ◀ ■
Results Messages
     Property Id Property Name Current Home Value
     5637
              BI property 2
                         4500000.00
     5597
              BI property 1
                         45.00
2
     5638
              BI property 3
                         3000000.00
```

1c. The assumption is that the rent is computed correct to the number of days. Hence, DAY is chosen to be the DATEPART used for the DATEDIFF function. If WEEK is used and the end date is 5/1/2019, this will compute the rent based on just 1 year (365 days) when in fact rent should also be collected for the first 5 days of 2019, in addition to the whole of 2018.

If the tenant is still renting, then there will be no end date or end date is NULL. In this case, the end date is taken to be the current date which is GETDATE(). The COASLESCE function is used to take the End Date if there is one. If it is NULL, then it will use the current date as the End Date.

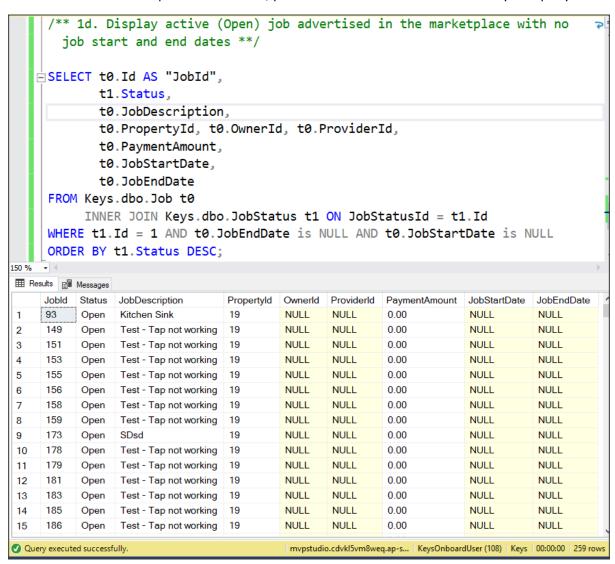
Property.lsOwnerOccupied = 1 for PropertyId = 5638. But this property is also tenanted as shown by the query results below. I am assuming that the owner is staying at this property and renting out rooms or part of the house. Hence, the owner is receiving rent payments even though this property is owner-occupied.



1d. Justin had added JobStatus table to the database and clarified in the Question Hub and Slack channel that only the Job table is required and this task is asking for active jobs that have no end dates (JobEndDate is NULL).

The following assumptions are made:

- Only "Open" (JobStatusId = 1) jobs are considered as active jobs. "InProgress" jobs are assumed
  to be awarded and hence, taken off the marketplace. Likewise, jobs marked as Finished,
  Cancelled and Deleted are assumed to be no longer active and should not be on the
  marketplace.
- Some jobs have a JobStartDate. Since a job already has started, it should no longer be offered in the marketplace. Hence, the query should also look for JobStartDate is NULL in addition to JobEndDate is NULL.
- I only display selected columns, rather than all columns, from the Job table. If additional columns are deemed to be required for this task, please let me know so that I can modify the query.



## 1e. To get current tenants, use WHERE Tenant.IsActive = 1

```
/** 1e. Display all property names, current tenants first and last names and rental payments per week/
      fortnight/month for the properties in question 1a. **/
    \stackrel{|}{\exists}SELECT t0.Id AS "Property Id",
            t0.Name AS "Property Name",
            t4.FirstName AS "Tenant First Name",
            t4.LastName AS "Tenant Last Name",
             '$' + CAST(t2.PaymentAmount AS varchar) +
            CASE t2.PaymentFrequencyId
               WHEN '1'THEN ' per week'
WHEN '2' THEN ' per fortnight'
                ELSE ' per month'
            END AS "Rental Payment"
    FROM Keys.dbo.Property t0
          INNER JOIN Keys.dbo.OwnerProperty t1 ON t0.Id = t1.PropertyId
          INNER JOIN Keys.dbo.TenantProperty t2 ON t0.Id = t2.PropertyId
          INNER JOIN Keys.dbo.Tenant t3 ON t2.TenantId = t3.id
          INNER JOIN Keys.dbo.Person t4 ON t3.Id = t4.Id
    WHERE t1.OwnerId = 1426
           AND t3.IsActive = 1;
Results Messages
    Property Id Property Name Tenant First Name Tenant Last Name Rental Payment
            Bl property 1 Nick
Bl property 2 Bl
   5597
                                       Johnson
                                                     $300.00 per week
                                                     $400.00 per fortnight
    5637
                                       Tenant
2
             Bl property 3 Bl
   5638
                                       Tenant
                                                     $1000.00 per month
3
```

## **Expense Report of Property A**

Current Owner: ABDC

Property address: 231 Great South Road, Drury, Auckland 2113, New Zealand

Property details: 2 Bedrooms, 2 Bathrooms

Rental payment: \$300 per week

Expense	Amount	Date
Rate assessment	300.00	20 Aug 2016
Rate assessment	300.00	20 Aug 2016
Rate assessment	300.00	20 Aug 2016
Rate assessment	300.00	20 Aug 2016