NASHVILLE HOUSING DATA (DATA CLEANING)

SQL PROJECT

The dataset contained information on housing data in the Nashville, TN area. I used SQL Server to clean the data to make it easier to use. For example, I converted some dates to remove unnecessary timestamps; I populated data for null values; I changed address columns from containing all of the address, city and state into separate columns; I changed a column that had different representations of the same data into consistent usage; I removed duplicate rows; and I deleted unused columns.

This dataset contains information about housing sales in Nashville, TN such as property, owner, sales, and tax information.



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/* Rename the data or table for our convenience */
rename table 'nashville housing data for data cleaning' to nashville_housing_data;
/* Checking for the missing value*/
UPDATE nashville_housing_data
SET PropertyAddress = CASE WHEN PropertyAddress = "THEN NULL ELSE PropertyAddress END,
  ParcelID = CASE WHEN ParcelID = "THEN NULL ELSE ParcelID END;
/* Standardize Date Format in SaleDate */
ALTER TABLE nashville_housing_data ADD COLUMN date DATE;
/*SELECT STR TO DATE(saleDate, '%M %e, %Y') AS date
FROM nashville_housing_data;*/
UPDATE nashville_housing_data
SET date = STR_TO_DATE(saleDate, '%M %e, %Y');
/* To delete the previous date column as it is of no use now after modification*/
alter table nashville_housing_data drop column date;
select * from nashville_housing_data;
select PropertyAddress, count(*) as times from nashville_housing_data group by PropertyAddress
having count(*)>1;
/* To check the duplicate values*/
select * from nashville housing data
where PropertyAddress in
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having count(*)>1);
ALTER TABLE nashville_housing_data
ADD COLUMN property_Address varchar(20),
ADD column property_city varchar(20);
/* Modify the size of the datatype of the address column*/
ALTER TABLE nashville_housing_data
MODIFY COLUMN property_Address VARCHAR(50);
ALTER TABLE nashville_housing_data
MODIFY COLUMN property_city VARCHAR(20);
/* Splitting the address into city and address columns*/
update nashville_housing_data
set property_Address= substring_index(substring_index(PropertyAddress, ',', 1),',', -1),
property_city= substring_index(PropertyAddress, ',', -1 );
select soldAsVacant,
       case when soldAsVacant = 'Y' then 'Yes'
                when soldAsVacant = 'N' then 'No'
    else soldAsVacant
    end
FROM nashville_housing_data;
update nashville_housing_data
set soldAsVacant = case when soldAsVacant = 'Y' then 'Yes'
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when soldAsVacant = 'N' then 'No'

(select PropertyAddress, count(*) as times from nashville_housing_data group by PropertyAddress

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else soldAsVacant
    end;
SELECT * FROM (SELECT *, row_number() over (
partition by parcelID,
propertyAddress,
salePrice,
saleDate,
legalReference
ORDER BY uniqueID
) as row_num
from nashville_housing_data
) t
where row_num > 1;
/* Delete unused columns. */
alter table nashville_housing_data
drop column OwnerAddress, drop column TaxDistrict, drop column PropertyAddress;
```