```
...ts\SQL Server Management Studio\SQLQuery_datacleaning.sql
                                                                               1
--cleaning data in SQL
Select *
from Housing
 --Standardize Date Format
Select SaleDate, CONVERT(date, SaleDate)
from Housing
update housing
set SaleDate = CONVERT(date, SaleDate)
--Populate Property Address Data
--By looking at the data we determine that if parcel id is same then property
 address is also the same i.e for parcel id 1 property adress is ABC
Select PropertyAddress
from Housing
ORDER BY ParcelID
select a.ParcelID,a.PropertyAddress,b.ParcelID,b.PropertyAddress,ISNULL
 (a.PropertyAddress, b.PropertyAddress)
from Housing as a
JOIN Housing as b
on a.ParcelID=b.ParcelID
AND a.UniqueID <> b.UniqueID --make row pairs where parcel id is same by unique id >>
 is different
WHERE a.PropertyAddress is NULL
update a
SET PropertyAddress=ISNULL(a.PropertyAddress,b.PropertyAddress)
from Housing as a
JOIN Housing as b
on a.ParcelID=b.ParcelID
AND a.UniqueID <> b.UniqueID --make row pairs where parcel id is same by unique id >>
 is different
WHERE a.PropertyAddress is NULL
```

--Breaking out address into individual columns(address,city,state)

```
--for property address
select
SUBSTRING(PropertyAddress,1,CHARINDEX(',',PropertyAddress)-1),
SUBSTRING(PropertyAddress, CHARINDEX(',',', PropertyAddress)+1,len(propertyAddress))
from Housing
alter table housing
add propertysplitAddress Nvarchar(255)
alter table housing
add propertysplitCity Nvarchar(255)
update Housing
set propertysplitAddress = SUBSTRING(PropertyAddress,1,CHARINDEX
                                                                                      P
  (',',PropertyAddress)-1)
update Housing
set propertysplitCity =SUBSTRING(PropertyAddress, CHARINDEX(',', PropertyAddress)
  +1,len(propertyaddress))
--for owner address
select OwnerAddress
from Housing
select
PARSENAME(REPLACE(ownerAddress,',',','.'),1),
PARSENAME(REPLACE(ownerAddress,',',','.'),2),
PARSENAME(REPLACE(ownerAddress,',',',','),3)
from Housing
alter table housing
add ownersplitAddress Nvarchar(255)
alter table housing
add ownersplitCity Nvarchar(255)
alter table housing
add ownersplitstate Nvarchar(255)
update Housing
set ownersplitAddress =PARSENAME(REPLACE(ownerAddress,',',','.'),3)
update Housing
set ownersplitcity=PARSENAME(REPLACE(ownerAddress,',',','.'),2)
update Housing
set ownersplitstate=PARSENAME(REPLACE(ownerAddress,',',','.'),1)
```

```
...ts\SQL Server Management Studio\SQLQuery_datacleaning.sql
--change y to yes and n to no in sold as vancant field
Select Distinct(SoldAsVacant), Count(SoldAsVacant)
From Housing
Group by SoldAsVacant
order by 2
Select SoldAsVacant
, CASE When SoldAsVacant = 'Y' THEN 'Yes'
     When SoldAsVacant = 'N' THEN 'No'
      ELSE SoldAsVacant
     END
From Housing
Update Housing
SET SoldAsVacant = CASE When SoldAsVacant = 'Y' THEN 'Yes'
     When SoldAsVacant = 'N' THEN 'No'
      ELSE SoldAsVacant
```

--delete unused columns
Select *

END

From Housing

ALTER TABLE Housing
DROP COLUMN OwnerAddress, TaxDistrict, PropertyAddress, SaleDate