SDEV300
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Lab Five

Summary

Users are shown all columns in the csv files, if all values in the column are numeric then statistics and a histogram is displayed.

Tests
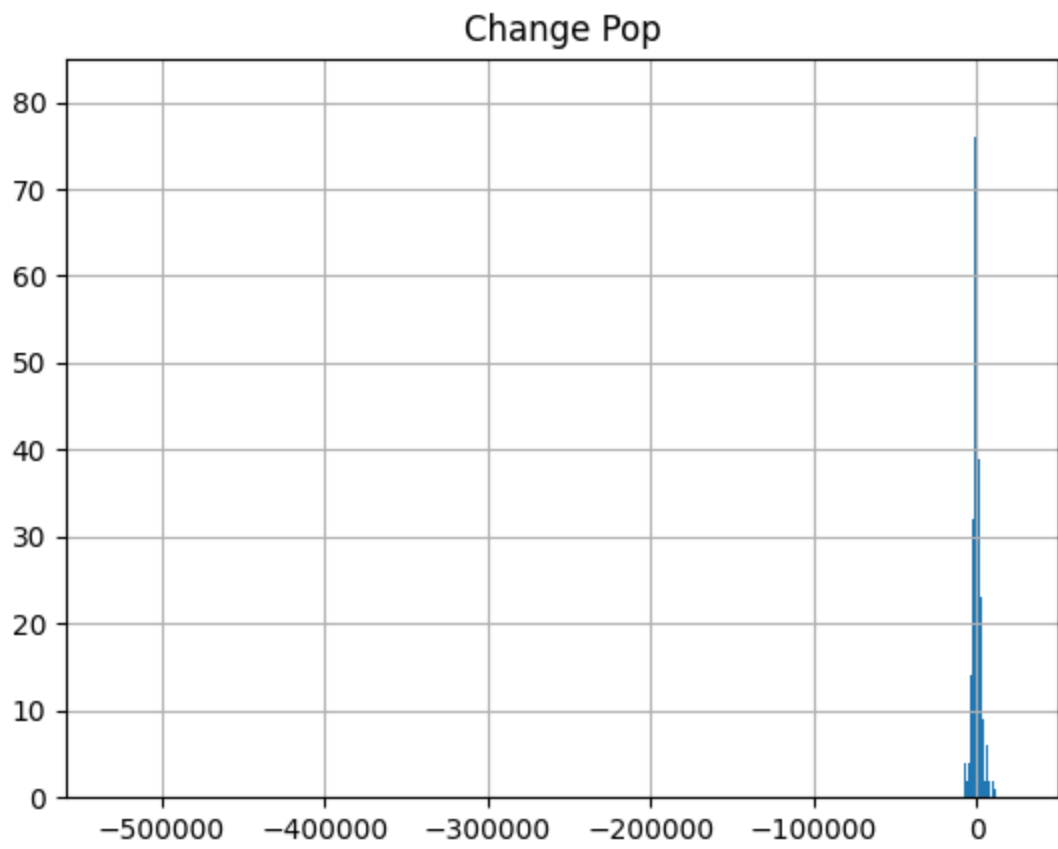
Test 1. Population Data

Column: Pop Apr 1

```
Select the file you want to analyze:
1: Population Data
2: Housing Data
3: Exit Program
1
Select the Column you want to analyze:
1: Id
2: Geography
3: Target Geo Id
4: Target Geo Id2
5: Pop Apr 1
6: Pop Jul 1
7: Change Pop
8: Exit DataFrame
5
You selected Pop Apr 1
The statistics for this column are:
Count =  557.00
Mean =  56557.31
Standard Deviation =  158127.11
Min =  13519.00
Max =  3726157.00
The Histogram of this column is now displayed.
```
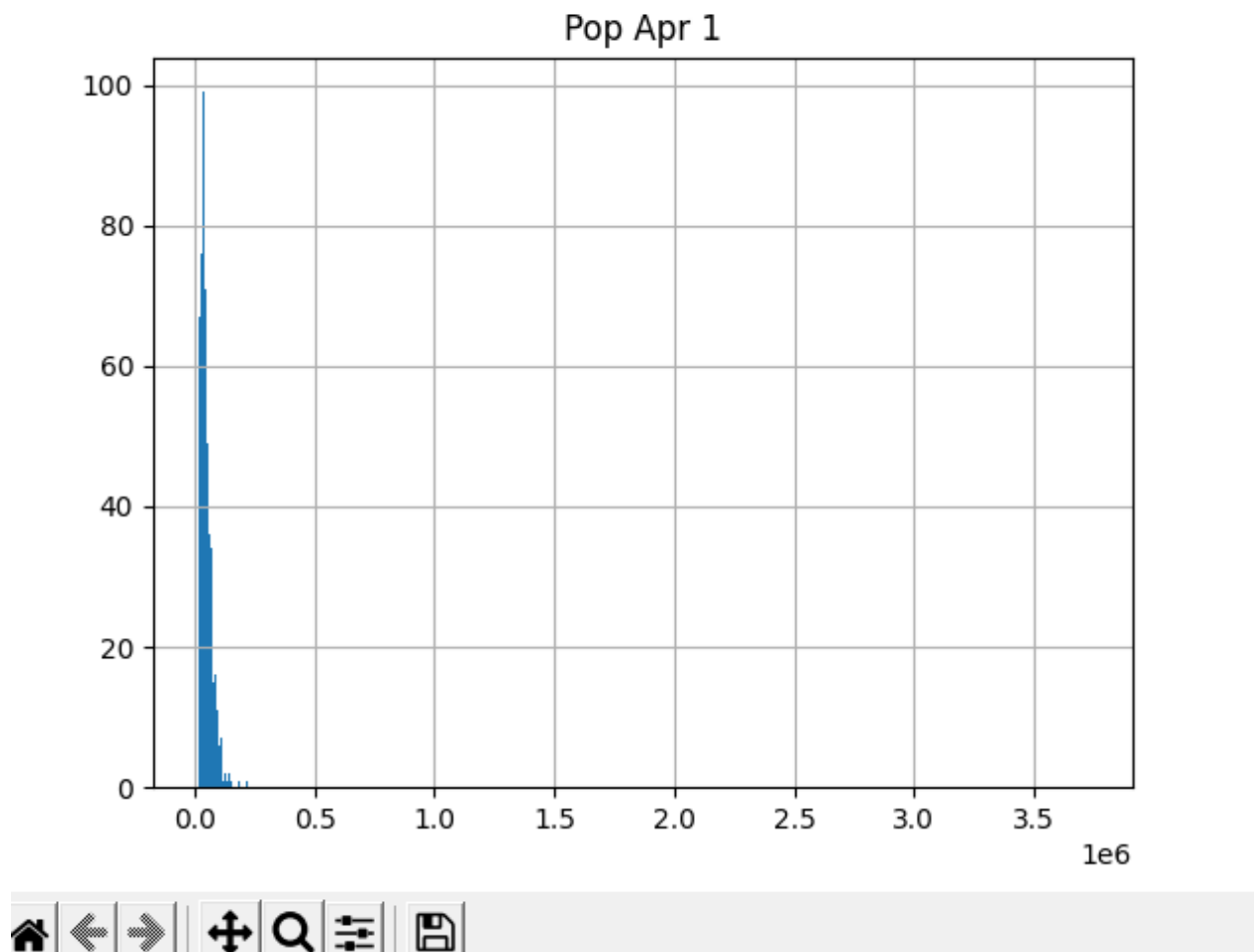
Column: Change Pop


```
You selected Change Pop
The statistics for this column are:
Count =  557.00
Mean = -798.83
Standard Deviation =  22711.35
Min = -531004.00
Max =  22363.00
The Histogram of this column is now displayed.
```

Change Pop

Column: Geography

```
2
You selected Geography
This column does not have numeric values.
Select the Column you want to analyze:
```
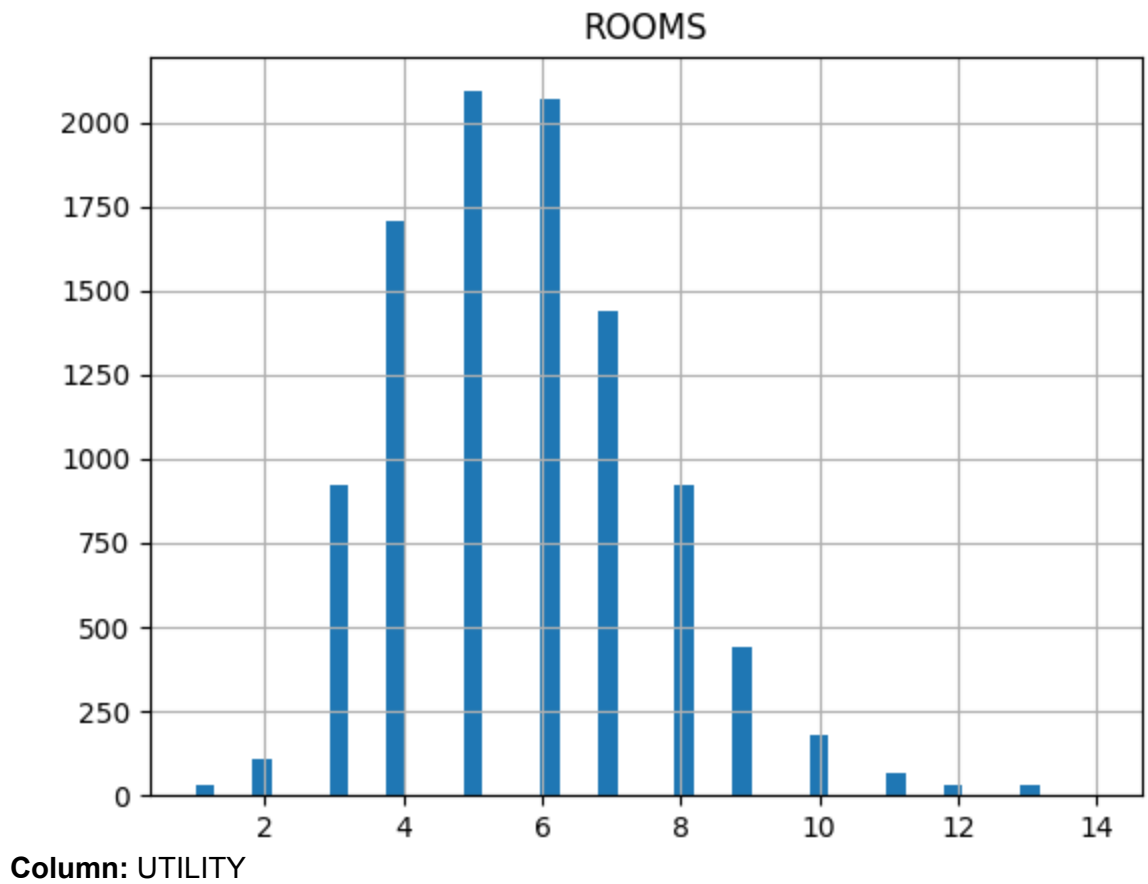
Test 2. Housing Data
    Column: BUILT

```
8
******************* Welcome to the Python Data Analysis App**********
Select the file you want to analyze:
1: Population Data
2: Housing Data
3: Exit Program
2
Select the Column you want to analyze:
1: AGE
2: BEDRMS
3: BUILT
4: NUNITS
5: ROOMS
6: WEIGHT
7: UTILITY
8: Exit DataFrame
3
You selected BUILT
The statistics for this column are:
Count =  10042.00
Mean =  1966.95
Standard Deviation =  26.31
Min =  1919.00
Max =  2012.00
The Histogram of this column is now displayed.
```
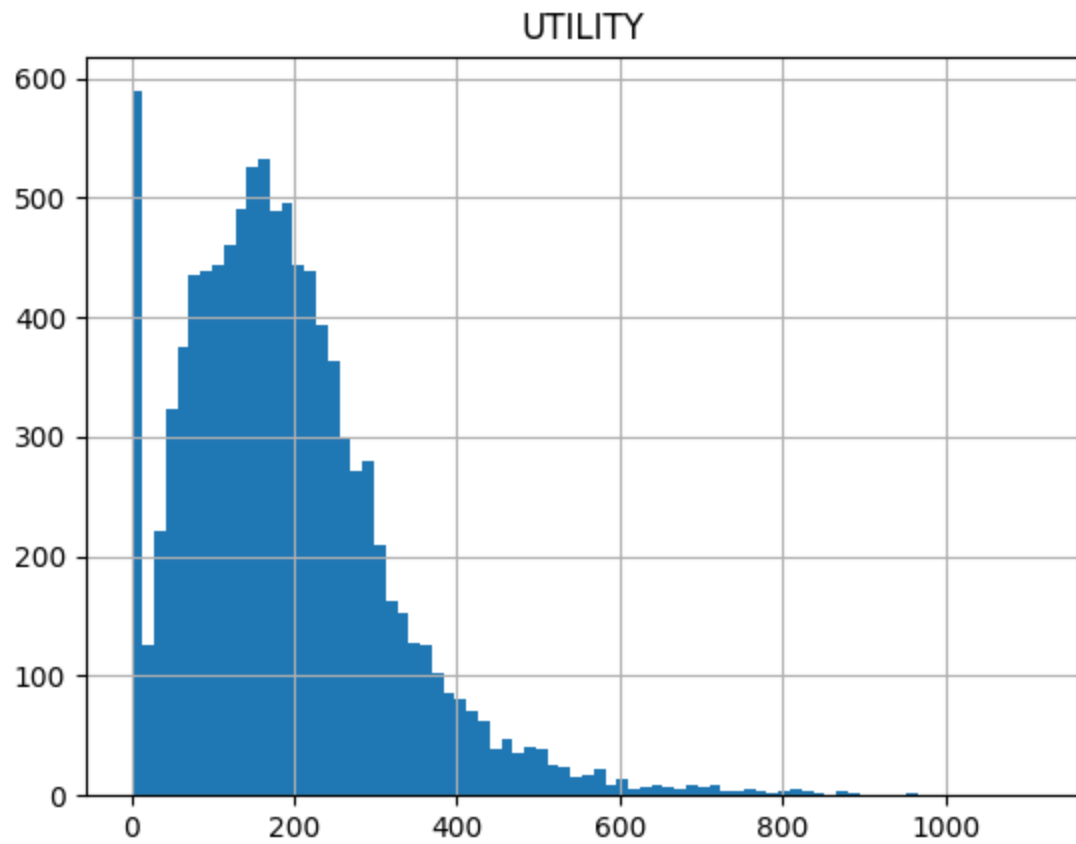
BUILT
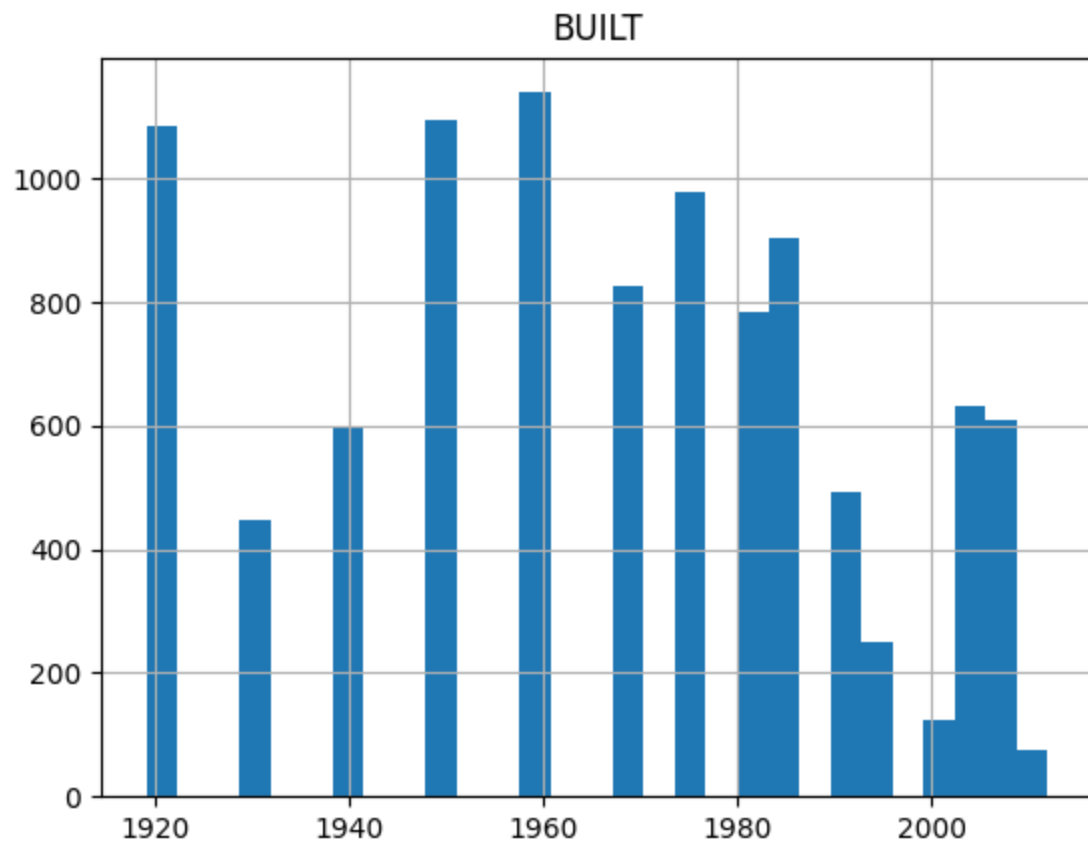
Column: ROOMS

```
You selected ROOMS
The statistics for this column are:
Count =  10042.00
Mean =  5.72
Standard Deviation =  1.88
Min =  1.00
Max =  14.00
The Histogram of this column is now displayed.
```

ROOMS

Column: UTILITY

```
You selected UTILITY
The statistics for this column are:
Count =  10042.00
Mean =  189.59
Standard Deviation =  128.93
Min =  0.00
Max =  1107.58
```

UTILITY

Test 3. Exit Program


```
******************** Welcome to the Python Data Analysis App***********
Select the file you want to analyze:
1: Population Data
2: Housing Data
3: Exit Program
3
Thank you for participating!
```

Test 4. Exit DataFrame

```
Select the Column you want to analyze:
1: Id
2: Geography
3: Target Geo Id
4: Target Geo Id2
5: Pop Apr 1
6: Pop Jul 1
7: Change Pop
8: Exit DataFrame
8
***************** Welcome to the Python Data Analysis App**********
Select the file you want to analyze:
1: Population Data
2: Housing Data
3: Exit Program
```

- Users are allowed to go back to the main menu with the "Exit DataFrame" option

Errors

Error 1.   Invalid Menu Option

```
          Welcome to the Python Data Analysis App
Select the file you want to analyze:
1: Population Data
2: Housing Data
3: Exit Program
4
Please enter a valid menu option
***************** Welcome to the Python Data Analysis App**********
Select the file you want to analyze:
1: Population Data
2: Housing Data
3: Exit Program
```

```
6: Pop Jul 1
7: Change Pop
8: Exit DataFrame
9
Please select a valid menu option.
Select the Column you want to analyze:
1: Id
2: Geography
3: Target Geo Id
4: Target Geo Id2
5: Pop Apr 1
6: Pop Jul 1
7: Change Pop
8: Exit DataFrame
```