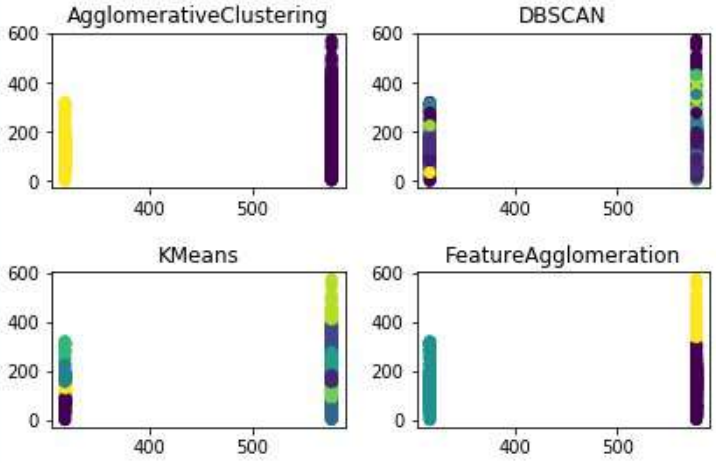
```
In [76]: runfile('C:/Users/Lenovo/assign10.py', wdir='C:/Users/Lenovo')

======================DATASET ANALYSIS======================
-----------------NAN Values---------------
SystemCodeNumber    0
Capacity            0
Occupancy           0
dtype: int64

-----------------value_count-----------------
<bound method IndexOpsMixin.value_counts of SystemCodeNumber    object
Capacity             int64
Occupancy            int64
dtype: object>

-------------DATASET info---------------------
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2000 entries, 0 to 1999
Data columns (total 3 columns):
SystemCodeNumber    2000 non-null object
Capacity            2000 non-null int64
Occupancy           2000 non-null int64
dtypes: int64(2), object(1)
memory usage: 47.0+ KB
None

-------------DATASET describe----------------------
          Capacity    Occupancy
count  2000.000000  2000.000000
mean    487.560000   154.170000
std     123.541562    87.553452
min     317.000000     0.000000
25%     317.000000    98.000000
50%     577.000000   147.000000
75%     577.000000   189.000000
max     577.000000   573.000000

In [77]:
```

```
====================ALL CLASSIFIER OUTPUT=======================

Accuracy Score of SVC: 0.9866666666666667
Correctly Classified/Total Sample  592 / 600

Accuracy Score Of LinearSVC  0.6566666666666666
Correctly Classified/Total Sample  394 / 600

Accuracy Score Of NuSVC  0.9533333333333334
Correctly Classified/Total Sample  572 / 600

Accuracy Score Of DecisionTreeClassifier  1.0
Correctly Classified/Total Sample  600 / 600

Accuracy Score Of KNeighborsClassifier  1.0
Correctly Classified/Total Sample  600 / 600

Accuracy Score Of GaussianNB  1.0
Correctly Classified/Total Sample  600 / 600

Accuracy Score Of MultinomialNB  0.7366666666666667
Correctly Classified/Total Sample  442 / 600

Accuracy Score Of LogisticRegression  1.0
Correctly Classified/Total Sample  600 / 600


In [81]:
```

```
In [90]: runfile('C:/Users/Lenovo/assign10.py', wdir='C:/Users/Lenovo')

==================Regression Models Output====================

Accuracy Score Of SVR  0.965
Correctly Classified/Total Sample  579 / 600

Accuracy Score Of SVR  1.0
Correctly Classified/Total Sample  600 / 600

Accuracy Score Of KNeighborsRegressor  1.0
Correctly Classified/Total Sample  600 / 600


In [91]:
```

```
In [92]: runfile('C:/Users/Lenovo/assign10.py', wdir='C:/Users/Lenovo')

====================Clustering Models Output======================

AgglomerativeClustering Prediction [0 0 0 ... 0 0 0]
DBSCAN Prediction [0 0 1 ... 5 7 2]
KMeans Prediction [7 7 7 ... 7 3 1]
Birch Prediction [0 0 0 ... 0 0 0]
```




```
In [93]:
```