## SAT \$ ACT @ 2017

**Created by : Lubna Asmi** 

#### Problem??

Finding the correlation between SAT 2017 and ACT 2017.



#### Steps:

- 1.Importing pandas libraries.
- 2.Importing SAT 2017 and ACT 2017 csv files to dataframes.
- 3.Data cleaning.
- 4. Data merging into one final data frame.
- 5.Creating data dictionary.
- 6.Exploratory data Analysis.
- 7.Data vizz
- 8.Conclusions
- 9.Recommendation

# DATA CLEANING:

- Change Data types in all dataset.
- Change percentage into float.
- Drop extra raw in ACT data set.
- Change some datas to make get more accuracy.

### More Cleaning:

- -FInding extra row national and deleting from act 2017 dataset.
- -Finding minimum math value as inappropriate, changed to more accurate value.
- -Finding science value as inappropriate, changed to more accurate value.
- -Finding composite act score as a object, changed to float.

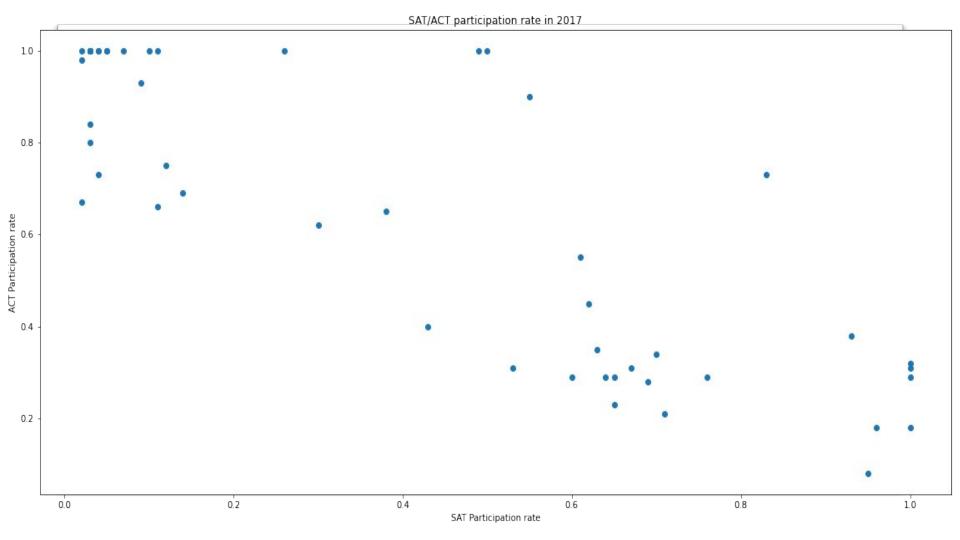
## **EDA**

**Summary Statistics** 

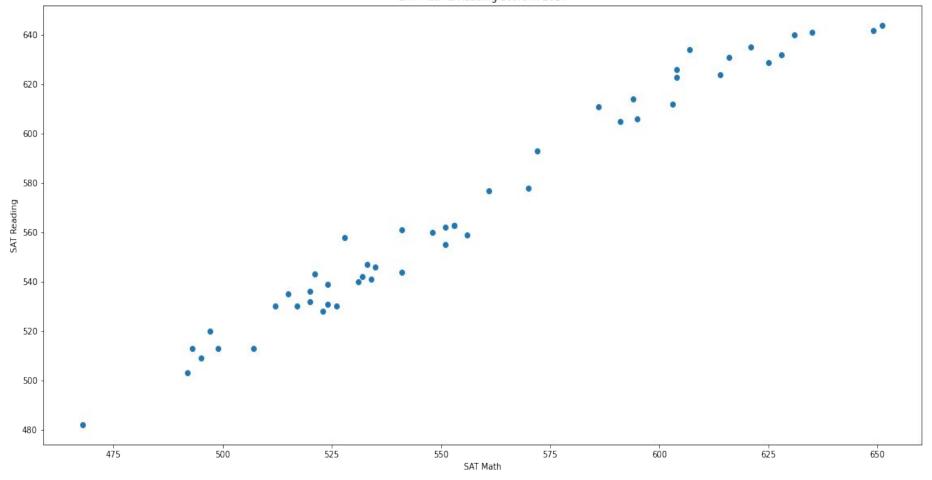
Investigate trends

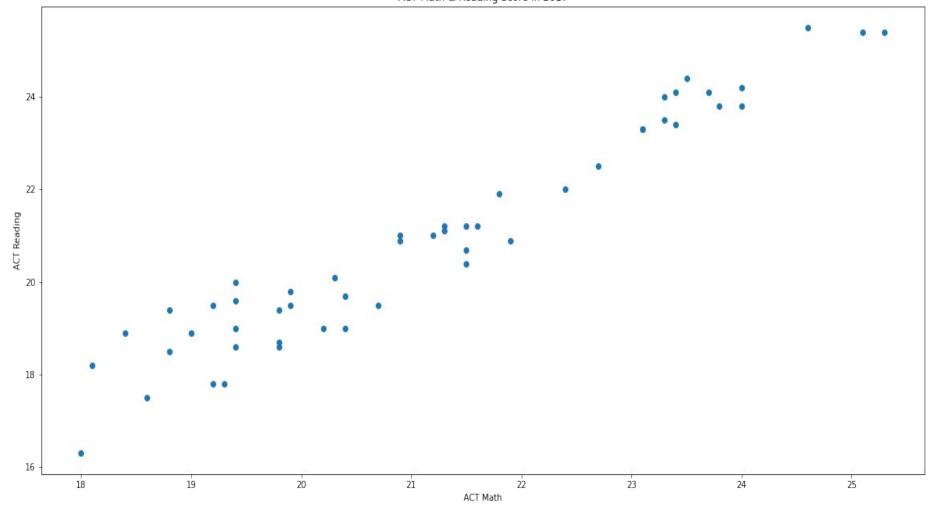
Finding patterns





SAT Math & Reading Score in 2017





#### CONCLUSION

- \* More states prefer ACT over SAT.
- \* 17 states with max 100% participation in ACT.
- \* 4 states with max 100% participation in SAT.
- \* The minimum participation rate was 8% in ACT and 2% in SAT.
- \*Students who scored max score in reading, scored max score in math as well.

#### Recommendation

- \* I recommend that the authorities should focus to raise SAT participation rates.
- \* Some states have low participation rate in both ACT and SAT, authorities should focus on these states to make 100% participation rate. Reducing exam fees or making it free of cost may be a good step to increase participation.
- \* Authorities may check student's background who scored low total score to ensure giving them more necessary support.

### THE END