

Write Up for Retail Analysis with Walmart Data

First of all, It's already nicely cleaned dataset. Thank you for that Team Simplilearn.

But I've done some advanced things to do this project using following.

1. Firstly imported necessary libraries.
2. Load the dataset.
3. Copy the original dataset.
4. Then doing data manipulation to find out null values. But I did not found any null values.
5. Then plot a distribution curve of target variable.
6. I found left skewed data of "Weekly_Sales".
7. Then treated it with taking log of the featured values.
8. Then plotted distribution of each and every feature to find whether I have to treat it or not.
9. But all the other feature are fine. They are partially normally distributed (For continuous variable).
10. Then plotted pair plots of the entire feature of the dataset.
11. Then made a heat map of correlation between the features.
12. Then I find which store has maximum sales.
13. Then, calculated maximum standard deviation of sales.
14. Then, Quarterly growth rate of Quarter 3, 2012.
15. Then, Holidays which have higher sales than mean sales in non-holiday season.
16. Then, Semester and monthly view of sales.
17. Building Train-Test Split of the data.
18. Started building the various machine learning models.
19. Firstly, I applied Linear Regression model.
20. Then, I standardized the train and test set to use it with maximum accuracy.
21. Then I applied KNNRegressor.
22. Then, Random Forest Regressor.
23. I found Random Forest Regressor with maximum accuracy.