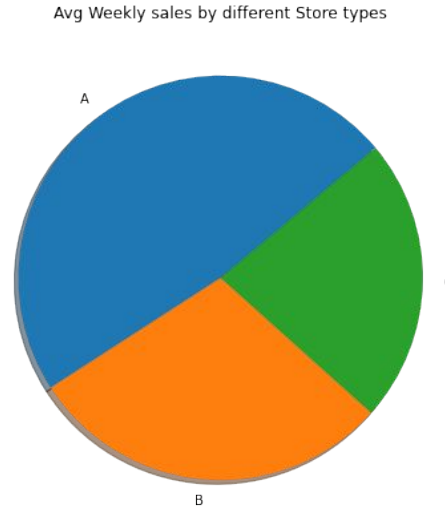
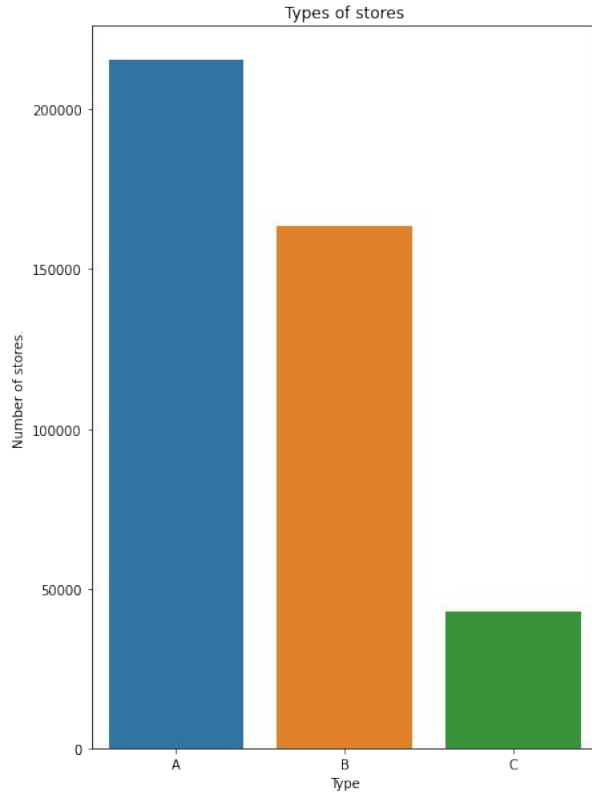


# Sales Forecasting

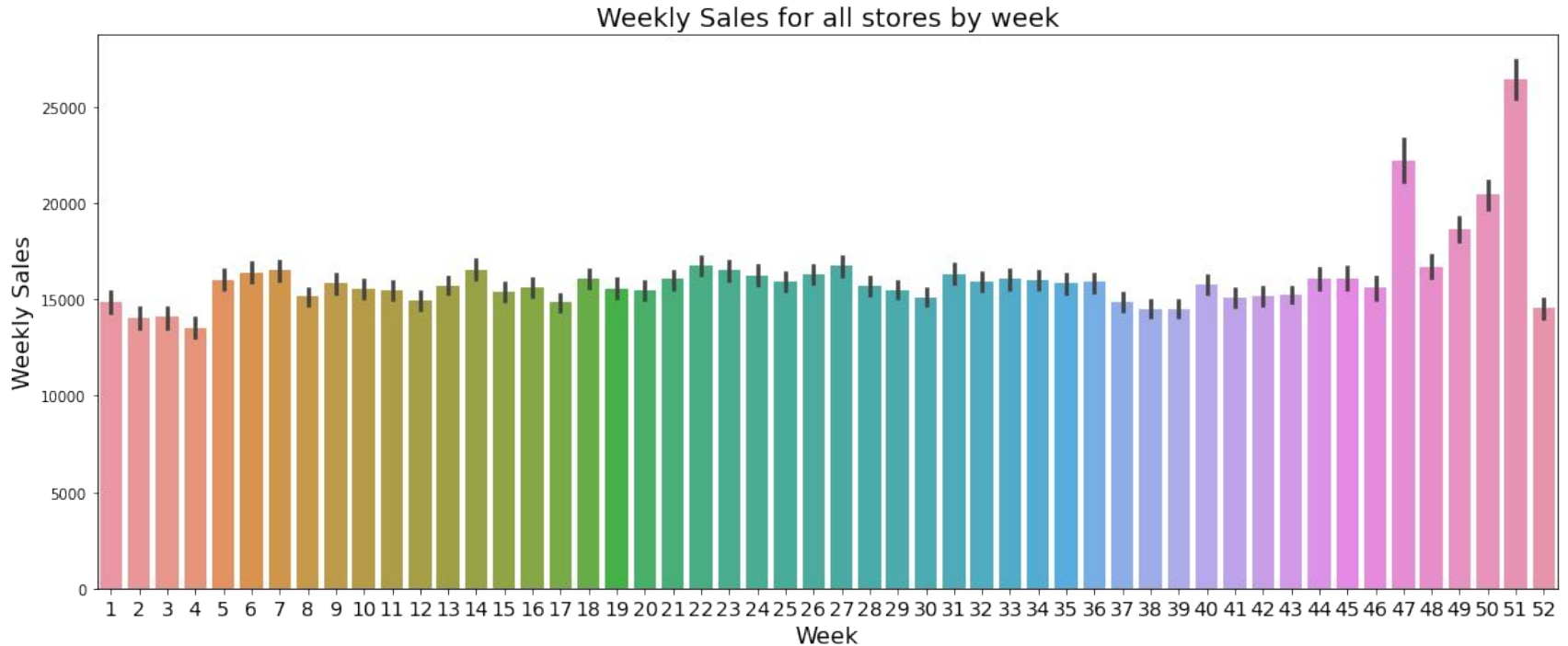
By: Isha Kasar

# EDA

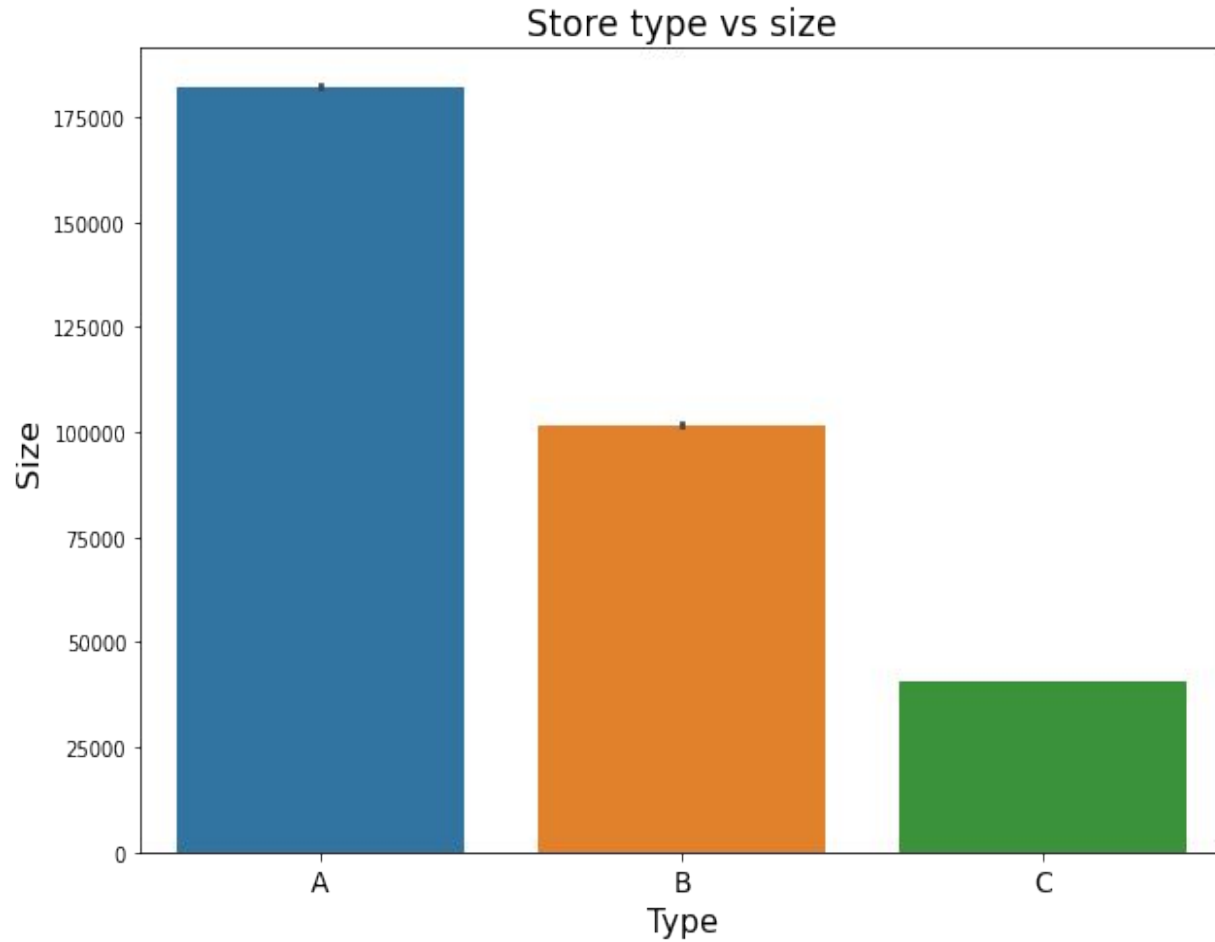


Types of stores  
and average  
weekly sales of  
individual store  
type

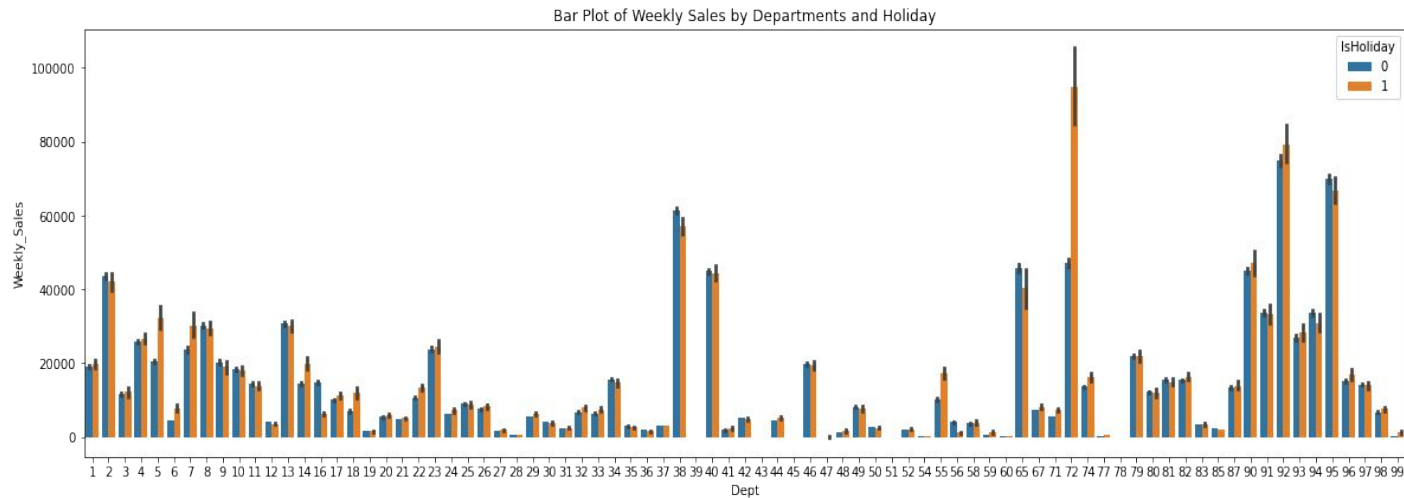
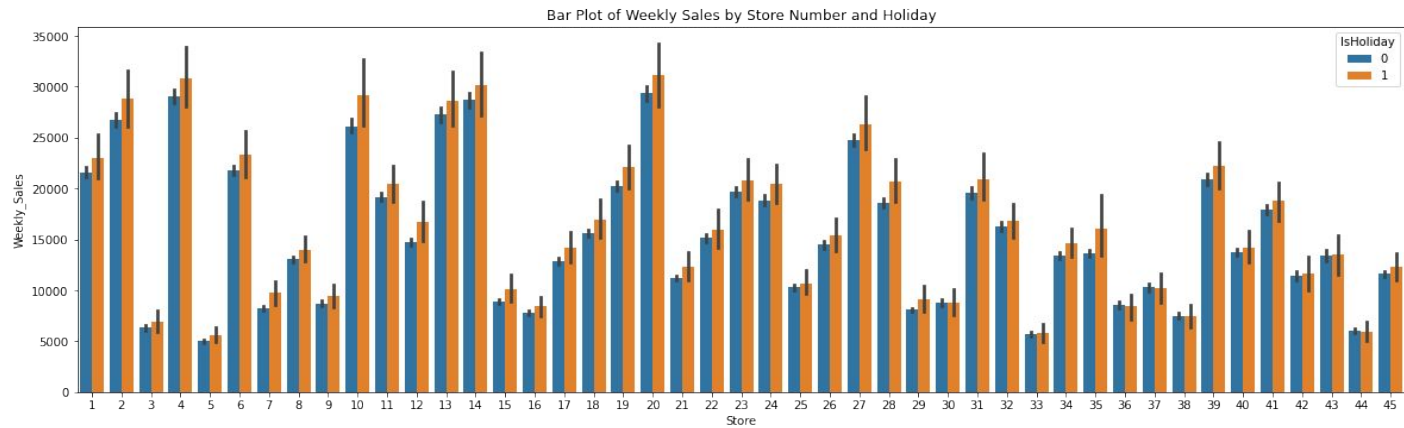
We can see some weeks in a month which shows hike.



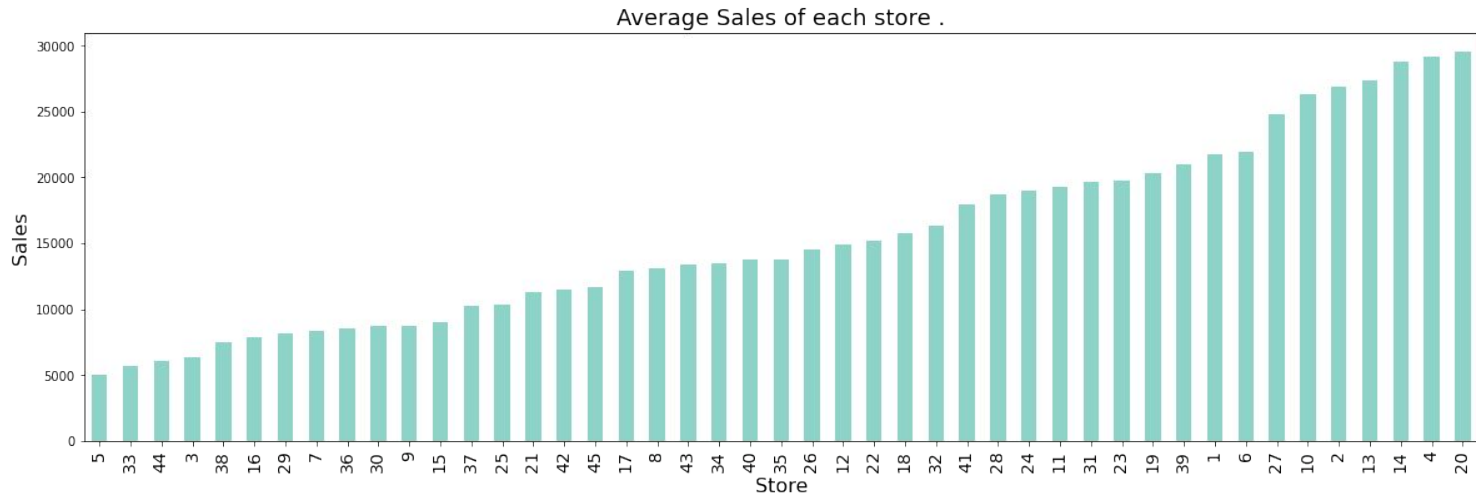
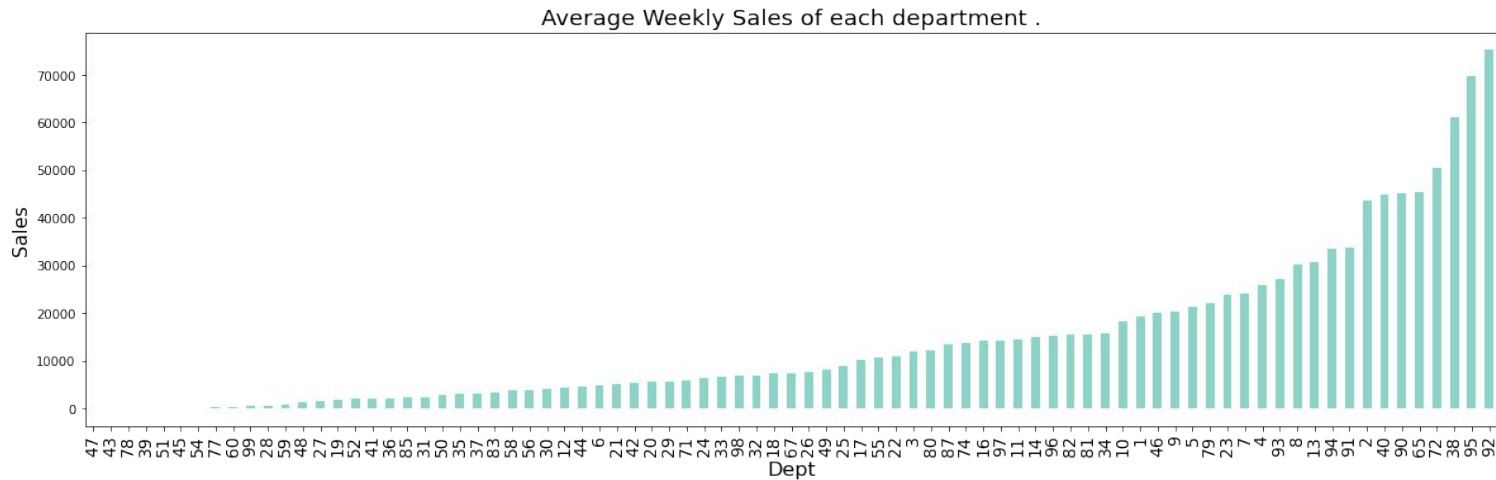
Thank You.



It is possible that  
type of store is  
decided by the  
size.

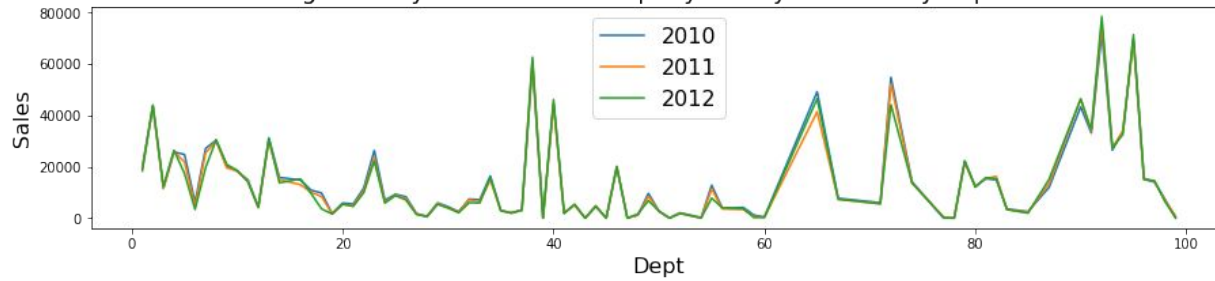


Effect of  
holiday on  
Store and  
individual  
departments.



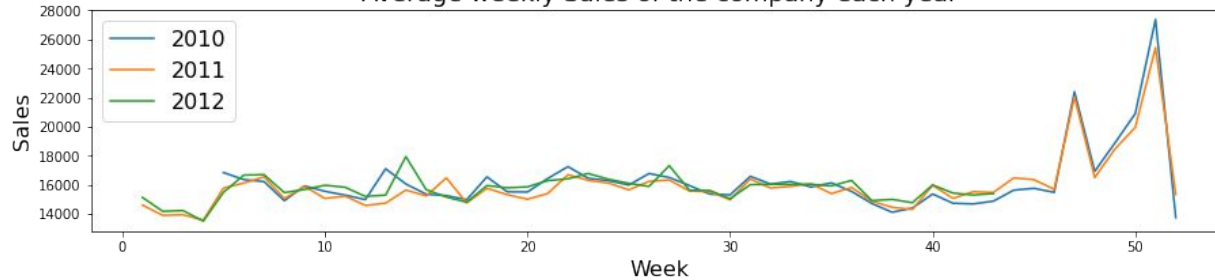
Average  
sales in  
every  
department  
and every  
store.

Average weekly Sales of the company each year in every department



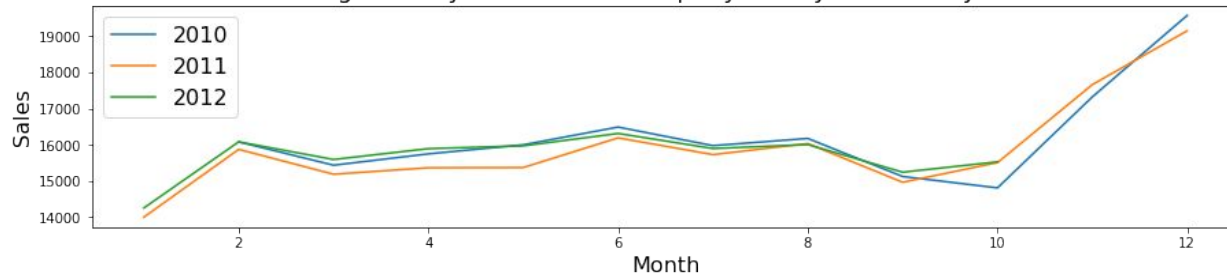
Sales in every department each year.

Average weekly Sales of the company each year



Sales every week each year.

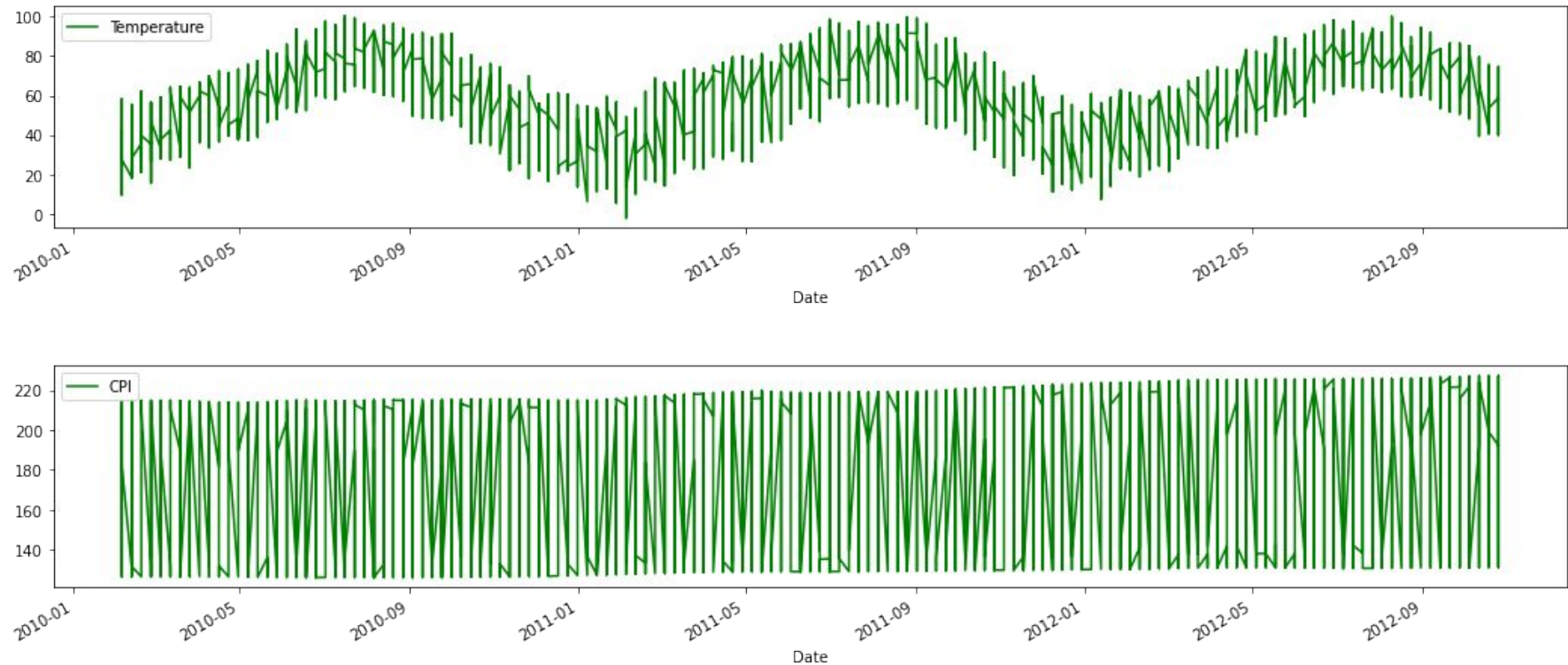
Average weekly Sales of the company each year in every month



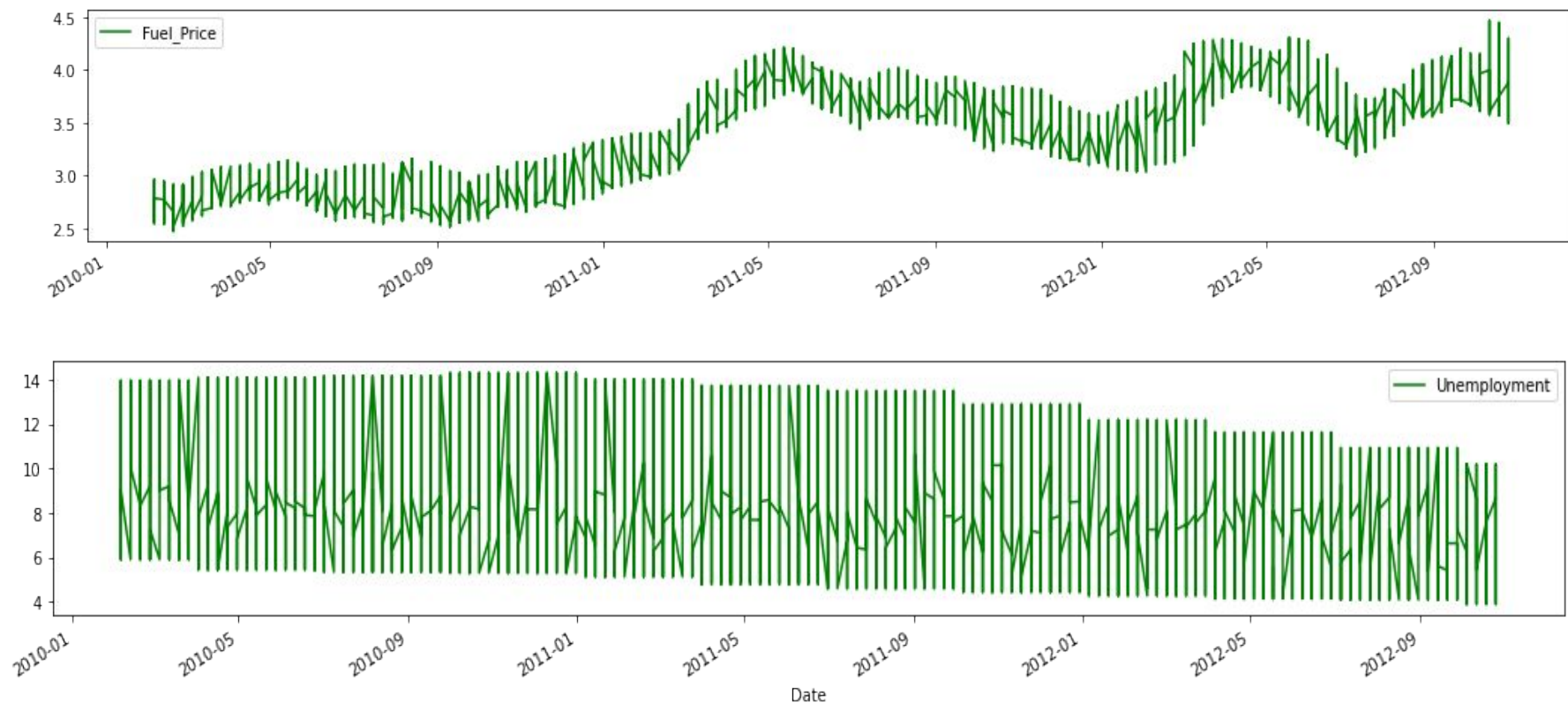
Sales every month each year.

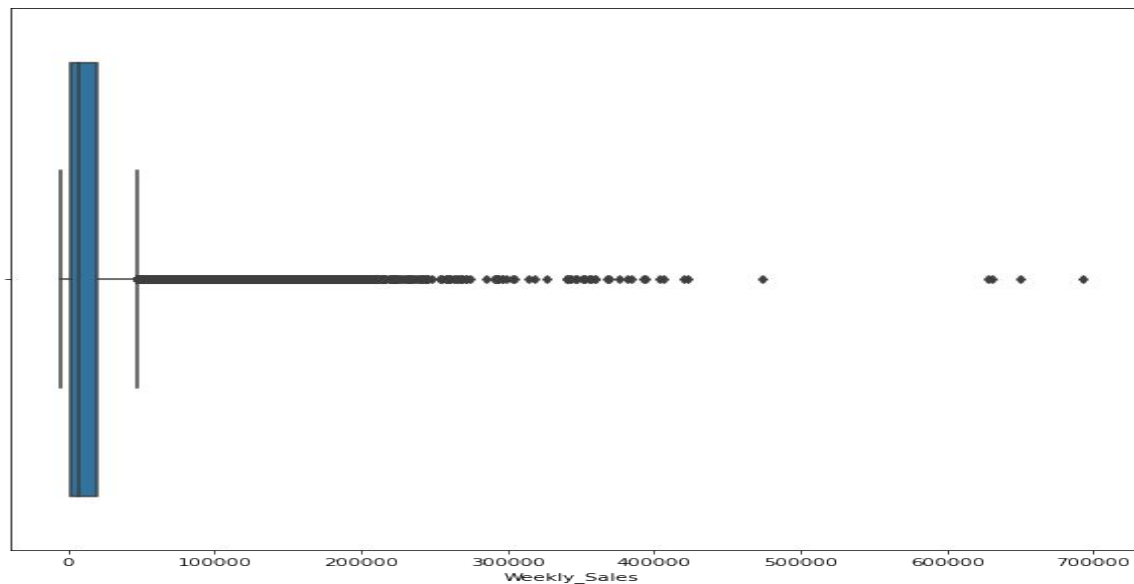


# Trend of temperature and CPI



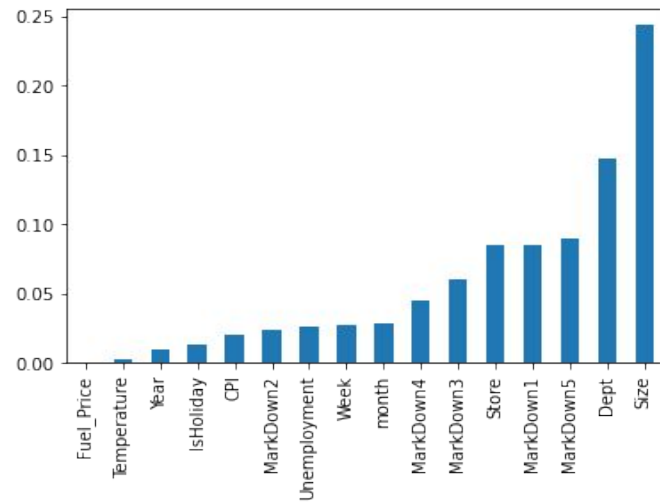
# Trend of Fuel price and Unemployment





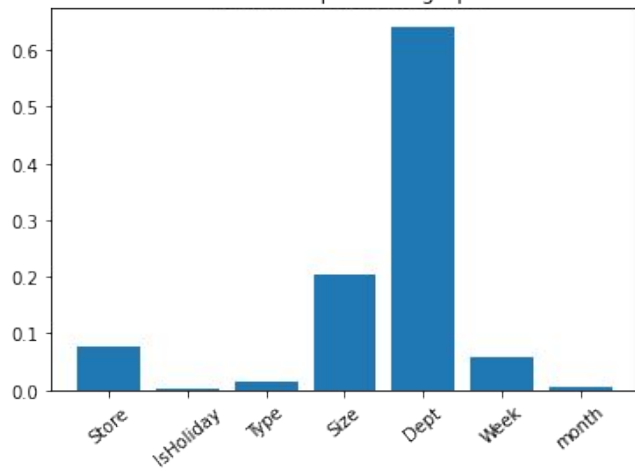
Box plot of dependent variable.

Correlation of all the variables with the dependent variable



# Performance of all three models

Feature Importance graph

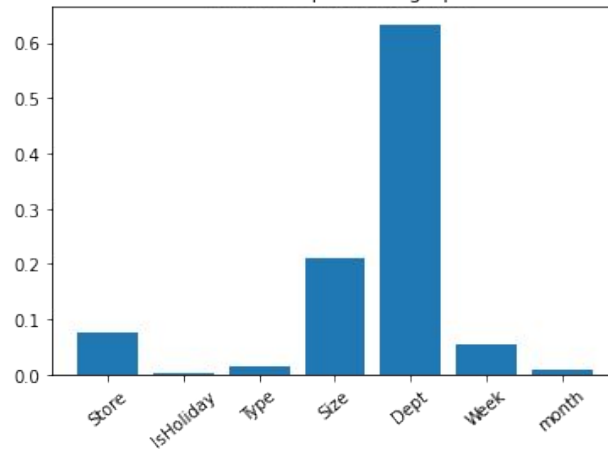


model(destree)

Train Result

R2 score	0.965107
MAE	1928.209170

Feature Importance graph

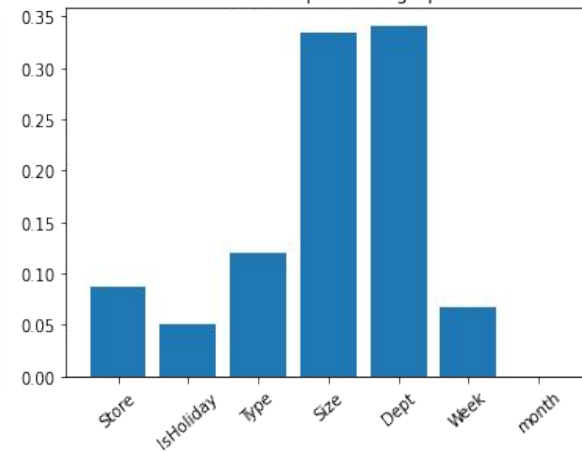


model(rforest)

Train Result

R2 score	0.970179
MAE	1757.568630

Feature Importance graph



model(xgb)

[15:39:34] WARNING: /work

Train Result

R2 score	0.739240
MAE	6924.964723

## Results of the model prediction, Actual and predicted sales of each year.

Average weekly Sales of the company each year

