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Overview

This Data Analysis report is to provide key insights on the performance of Walmart's stores gathered using the data provided by Walmart on Kaggle.com.

Introduction

Walmart posted a challenge on Kaggle.com, demanding insights on how their stores were performing. The data they provided was for 45 stores with weekly sales for 3 fiscal years i.e., 2010-2012.

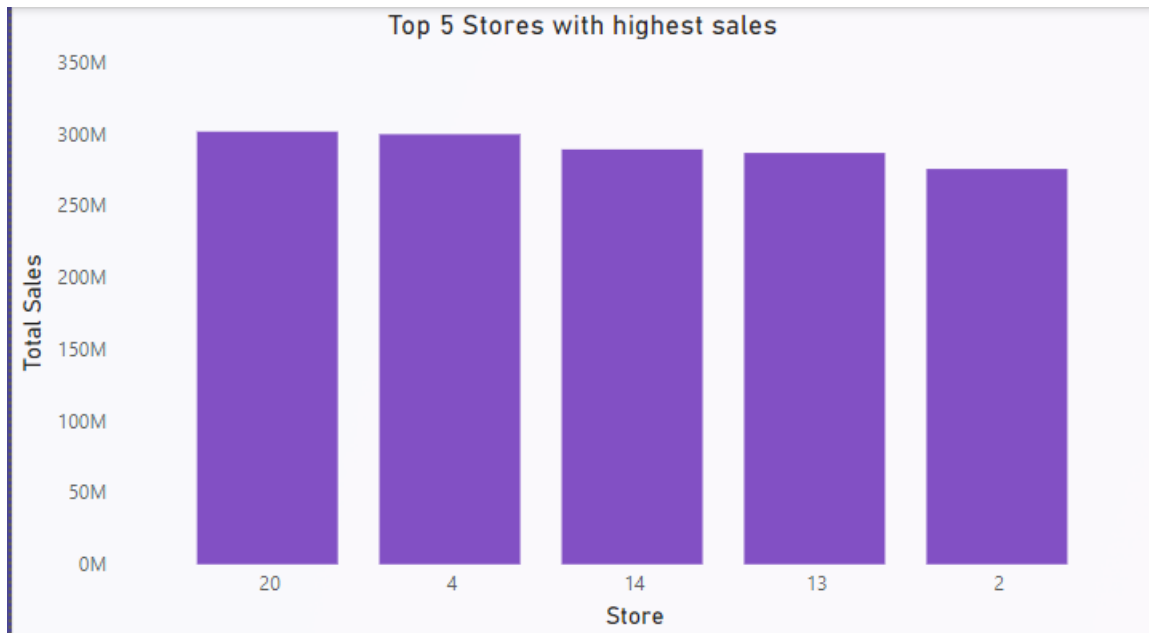The stakeholders wanted following questions to be answered:
1) Which store has maximum sales

2) Which store has maximum standard deviation i.e., the sales vary a lot.

3) Which store/s has good quarterly growth rate in Q3'2012

4) Some holidays have a negative impact on sales. Find out holidays which have higher sales than the mean sales in non-holiday season for all stores together

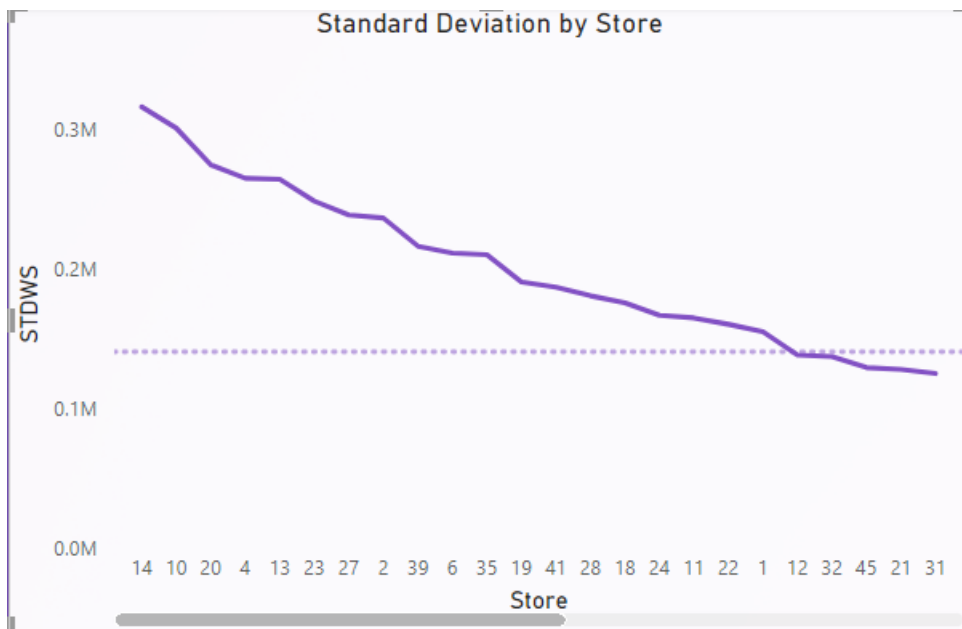5) Provide an overall view of sales in units and give insights

Methodology

Since the data quality was excellent there was no requirement for data cleaning activity. Hence, the project started with Data Transformation phase (using python). After data transformation, EDA – Exploratory Data Analysis was carried out (using Power BI) to answer the key questions.
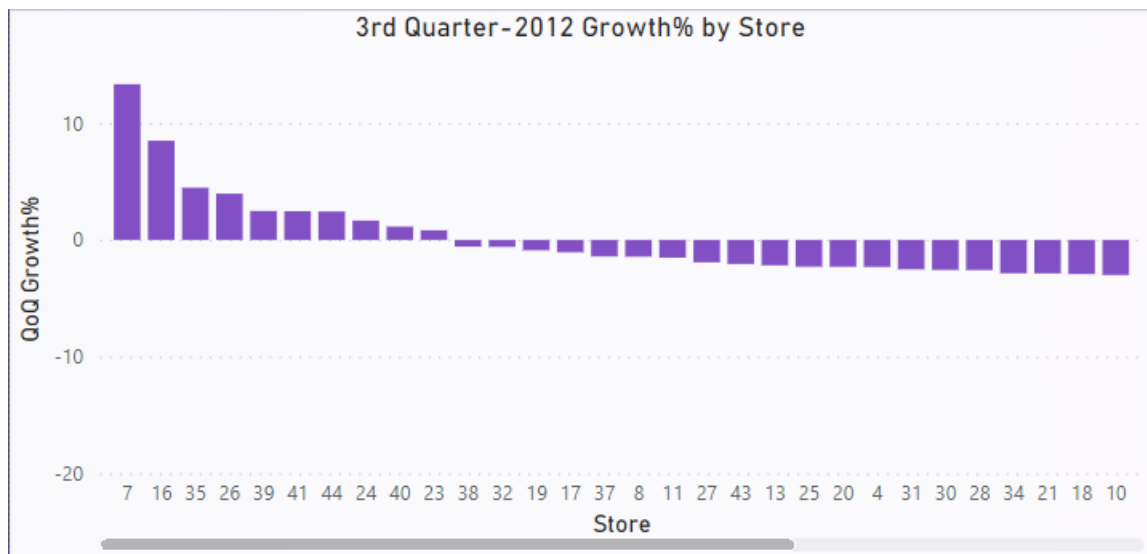
Findings

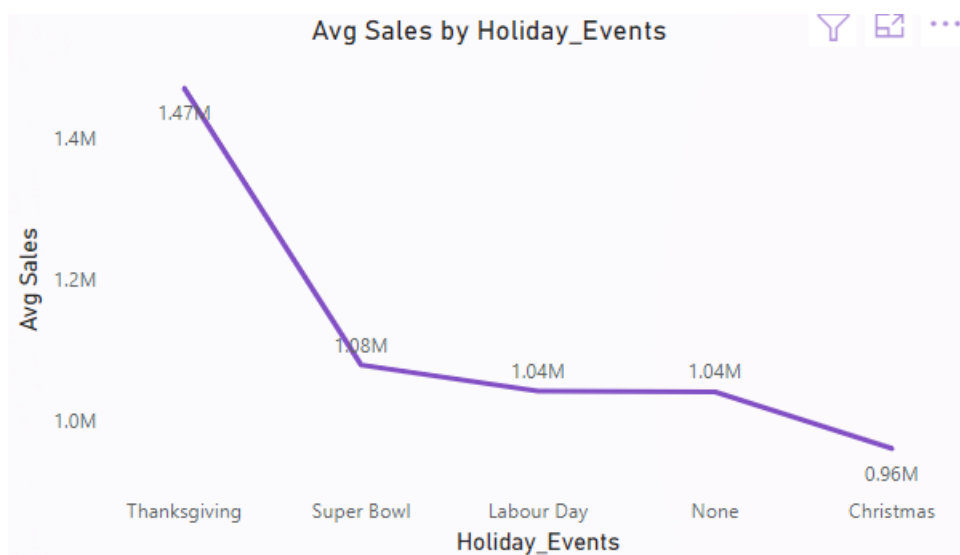## Which store has maximum sales

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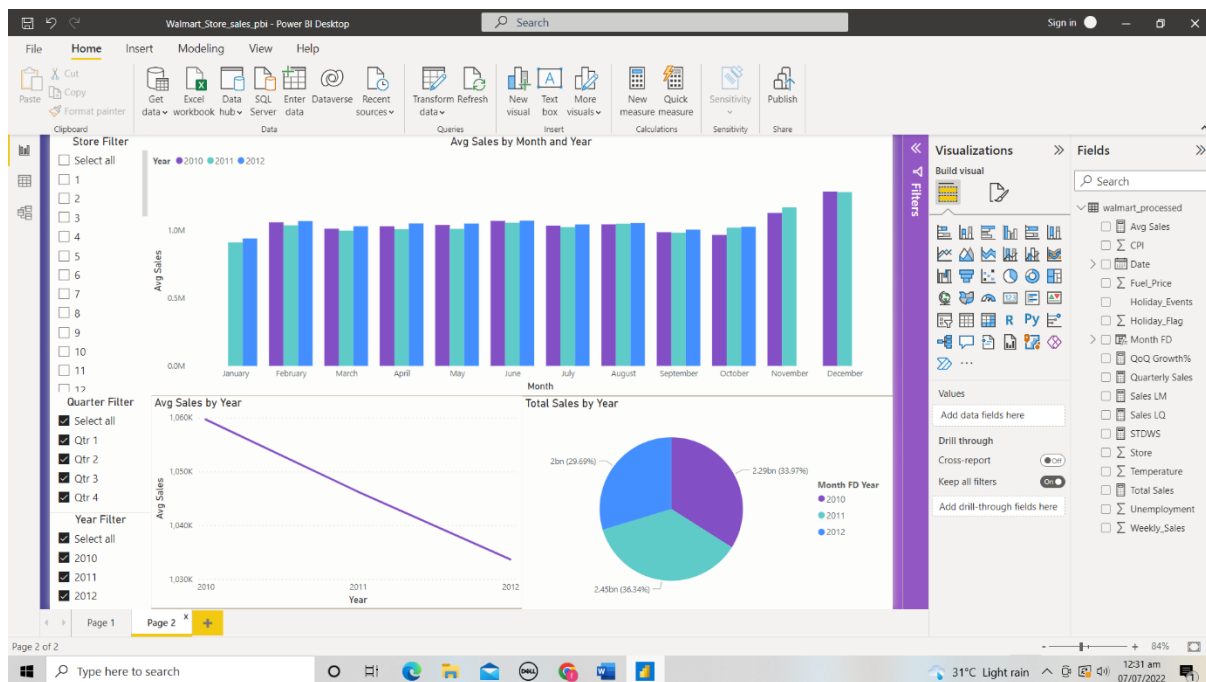
Which store/s has good quarterly growth rate in Q3'2012

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Provide an overall view of sales in units and give insights

Conclusion

Looking at the results we find out that overall, the yearly sales are continuing to decrease which is an alarming situation for Walmart and the issue needs to be addressed if they are to maintain business.

Secondly, by looking at the answers to Q4 and Q5 together we can notice that even though the average sales for Christmas period are lowest compared to other holiday or non-holiday weeks, the overall average sales for the month of December are highest for both fiscal years the record was provided for. This might indicate that unlike other holidays customers prefer to stock up prior to Christmas weeks. Hence, to capture the opportunity, Walmart needs to plan ahead and direct its sales and promotional efforts for the mid of December.