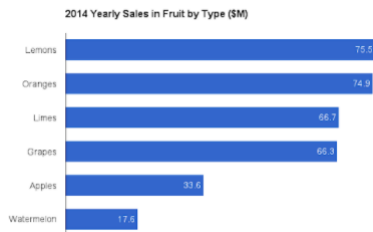


1.

Good Example:

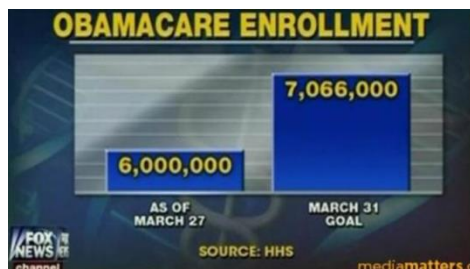


¹ This bar chart effectively demonstrated the fruit sales by type in 2014 which includes oranges, limes, lemons, grapes, apples, and watermelon.

The reason for this visualization to be good is that it effectively separated several individual groups into different bars which is the most advantage of the bar chart. Also, it has arranged the sales of the fruits

by sizes of the bars which represents the sale amount. Last but not least, the number of the sale amount of each fruit is showed at the end of each bar.

Bad Example:



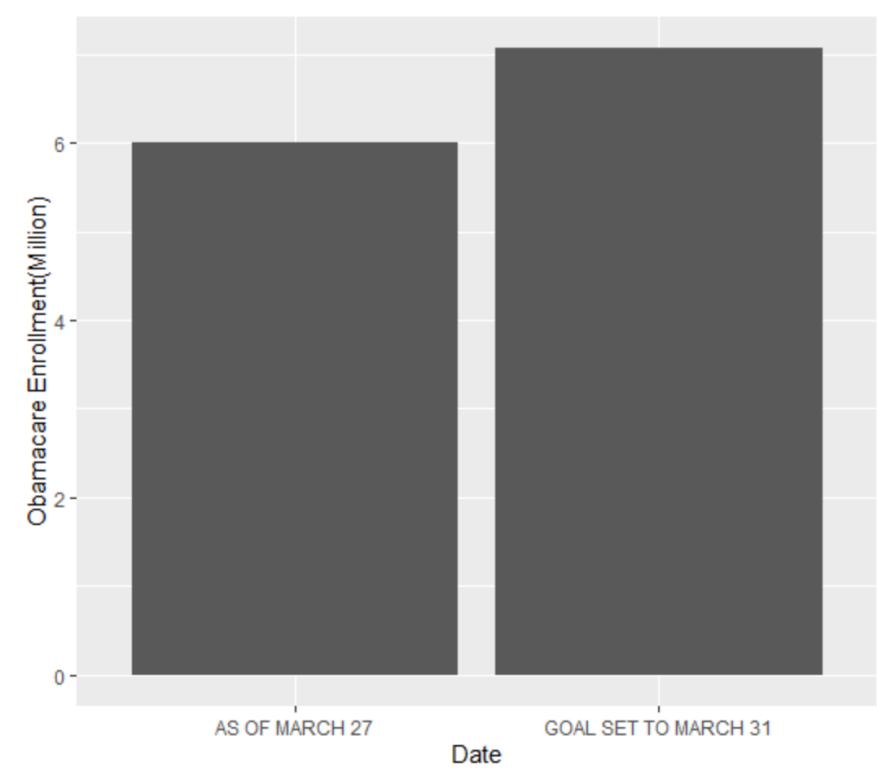
² This bar chart showed the enrollment of the Obamacare as of the March 27 and the goal set to the March 31.

As you can see, this bar chart is totally misleading. Obviously, the enrollment of the Obamacare as of the March 27 was 6,000,000 while the goal set to the March 31 was 7,066,000.

So, there was only 1,066,000 differed which meant that the enrollment as of March 27 should only be a few less than the goal in March 31. However, in the chart, the height of the bar which represented the enrollment as of March 27 was ridiculously less than the bar which represented the goal in March 31.

¹ myles. "Good Data Visualization Should Be Boring." *Everyday Analytics*, 19 Oct. 2015, everydayanalytics.ca/2015/10/good-data-visualization-should-be-boring.html.

² Couron, Aaron. "The 9 Worst Data Visualizations Ever Created." *Living Qlik*, 2 May 2017, livingqlikview.com/the-9-worst-data-visualizations-ever-created/.



```
> library(ggplot2)
> # create the column name and the value of the column
> mydata <- data.frame(name=c("AS OF MARCH 27", "GOAL SET TO MARCH 31"), value
=c(6, 7.066))
> # set the name of the axis and create the plot
> ggplot(mydata, aes(x=name, y=value)) + geom_bar(stat = "identity") + labs(x
= "Date", y = "Obamacare Enrollment(Million)")
```

This visualization shows the proper information for the viewer of the enrollment of Obamacare as of March 27 and the goal set to March 31.

To make the Bad Example be more normalized, I have rebuilt the plot. First, there is a new Y axis which is start from 0. Also, the difference of the heights of two bars have been changed to be more standard but not misleading.