VermaGourav_Week_11-12_R

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Gourav Verma Week 11-12 Histogram Box-Plot Bullet Chart - Using R

```
[4]: library(readxl)
     library(plotly)
     library(reshape2)
```

```
Warning message:
"package 'reshape2' was built under R version 3.6.3"
```

```
[5]: data <- read.csv('education.csv')
```

```
[6]: head(data)
```

A data.frame: 6 × 7

	state <fct>	reading <int>	math <int>	writing <int>	percent_graduates_sat <int>	pupil_staff_ratio <dbl>
1	United States	501	515	493	46	7.9
2	Alabama	557	552	549	7	6.7
3	Alaska	520	516	492	46	7.9
4	Arizona	516	521	497	26	10.4
5	Arkansas	572	572	556	5	6.8
6	California	500	513	498	49	10.9

Histogram

```
[7]: fig <- plot_ly(x = data$reading,
                type = "histogram")

     fig
```

HTML widgets cannot be represented in plain text (need html)

Box Plot

```
[8]: fig <- plot_ly(y = ~data$math, type = "box", name = 'Math')
     fig <- fig %>% add_trace(y = ~data$writing, name = 'Writing')

     fig
```

HTML widgets cannot be represented in plain text (need html)

1

Bullet Chart
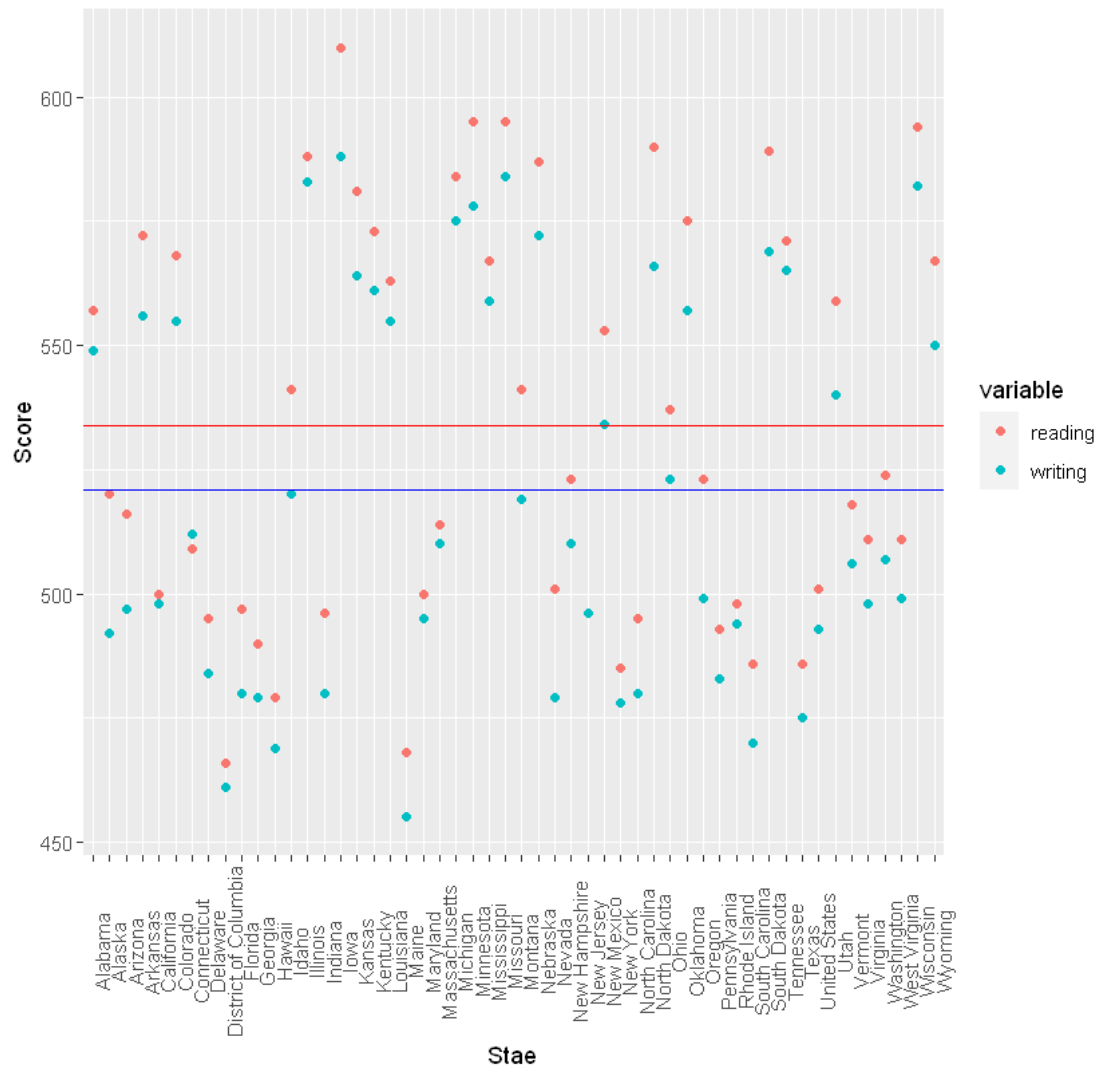
```
[11]: fig <- plot_ly(
        type = "indicator",
        mode = "number+gauge+delta",
        gauge = list(shape = "bullet",
                     bar = list(color = 'gray')),
        delta = list(reference = 600),
        value = mean(data$reading) ,
        domain = list(x = c(0, 1), y = c(0, 1)),
        title= "Reading",
        height = 150,
        )

      fig <- fig %>%
        layout(margin = list(l= 100, r= 10))

      fig
```

```
HTML widgets cannot be represented in plain text (need html)
```

Scatter Plot

```
[12]: d <- data.frame(x=data$state,
                      reading=data$reading,
                      writing=data$writing)

      dm   <- melt(d,id.var=1)


      ggplot(data=dm, aes(x, value, colour = variable)) + geom_point() + labs( x =␣
      ↪'Stae', y = 'Score', title = 'Childrens Scores for Subjects by State') +␣
      ↪theme(axis.text.x = element_text(angle = 90))+geom_hline(yintercept =␣
      ↪mean(data$writing), color="blue")+ geom_hline(yintercept =␣
      ↪mean(data$reading), color="red")
```

Childrens Scores for Subjects by State

```

```