

Hw-3

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```
setwd("/cloud/project")
Text <- read.csv("TextMessages.csv", header =TRUE)
names(Text)
```

```
## [1] "Group"      "Baseline"   "Six_months" "Participant"
```

```
is.factor(Text$Six_months)
```

```
## [1] FALSE
```

```
install.packages("pastecs")
library(pastecs)
round( stat.desc(Text$Baseline) , 2)
```

| ## | nbr.val | nbr.null | nbr.na | min | max | range |
|----|---------|----------|--------|---------|--------------|--------|
| ## | 50.00 | 0.00 | 0.00 | 46.00 | 89.00 | 43.00 |
| ## | sum | median | mean | SE.mean | CI.mean.0.95 | var |
| ## | 3261.00 | 64.50 | 65.22 | 1.51 | 3.03 | 113.52 |
| ## | std.dev | coef.var | | | | |
| ## | 10.65 | 0.16 | | | | |

```
round( stat.desc(Text$Six_months) , 2)
```

| ## | nbr.val | nbr.null | nbr.na | min | max | range |
|----|---------|----------|--------|---------|--------------|--------|
| ## | 50.00 | 0.00 | 0.00 | 9.00 | 79.00 | 70.00 |
| ## | sum | median | mean | SE.mean | CI.mean.0.95 | var |
| ## | 2870.00 | 60.50 | 57.40 | 1.97 | 3.96 | 194.12 |
| ## | std.dev | coef.var | | | | |
| ## | 13.93 | 0.24 | | | | |

*#from this given data set we can determine that their
#are 50 participants. The mean is 57.4. It is lower than the baseline mean at
#65.22, which indicates a decline from baseline to sixmonths. The standard
#deviation is 13.93 which shows that there is variability among the participants
#six month scores. The min value is 9 showing that a least one person scored
#very low.The max score is 79, which is lower than baseline of 89. This shows
#that participants generally scored lower at the six month point versus baseline.
#The first quartile is 53 meaning 25% of people scored below this value. The
#median is the midpoint which is 60.5. Lastly, the 3rd quartile is 63, the point
#of where 75% of the scores fall.*

```
stats_list <- lapply(Text[, c("Baseline", "Six_months")], function(x) stat.desc(x, basic = TRUE, desc =  
combined_stats <- do.call(cbind, stats_list)  
colnames(combined_stats) <- c("Baseline", "Six_Months")  
combined_stats <- round(combined_stats, 2)  
print(combined_stats)
```

| ## | Baseline | Six_Months |
|-----------------|----------|------------|
| ## nbr.val | 50.00 | 50.00 |
| ## nbr.null | 0.00 | 0.00 |
| ## nbr.na | 0.00 | 0.00 |
| ## min | 46.00 | 9.00 |
| ## max | 89.00 | 79.00 |
| ## range | 43.00 | 70.00 |
| ## sum | 3261.00 | 2870.00 |
| ## median | 64.50 | 60.50 |
| ## mean | 65.22 | 57.40 |
| ## SE.mean | 1.51 | 1.97 |
| ## CI.mean.0.95 | 3.03 | 3.96 |
| ## var | 113.52 | 194.12 |
| ## std.dev | 10.65 | 13.93 |
| ## coef.var | 0.16 | 0.24 |
| ## skewness | 0.24 | -1.28 |
| ## skew.2SE | 0.35 | -1.90 |
| ## kurtosis | -0.80 | 2.54 |
| ## kurt.2SE | -0.61 | 1.92 |
| ## normtest.W | 0.98 | 0.88 |
| ## normtest.p | 0.40 | 0.00 |

#The purpose of the code above is to get a clearer look of the stats side by side. We can note some significant differences as stated above.