Customer Satiscafion Case Study

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```
library(data.table)
```

```
## Warning: package 'data.table' was built under R version 3.4.4
```

```
options(scipen = 999)
```

Importing the file

```
cusx <-  fread("~/Case studies/Customer Experience hypothesis/Testing_Of_Hypothesis.csv", sep
 = ",", stringsAsFactors = F)
```

Q1

This question asks to verify if the average customer satisfaction score for Samsung is equal to 75%.

This means that a test should be done to see if the actual average satisfaction level is significantly different from 75

This would require a 1-test or a some sample t-test. As there is no information on the population a t-test has to be done

```
t.test(cusx$`Samsung Score`,mu= 75, alternative = "greater")
```

```
##
##  One Sample t-test
##
## data:  cusx$`Samsung Score`
## t = 8.3583, df = 99, p-value = 0.0000000000002037
## alternative hypothesis: true mean is greater than 75
## 95 percent confidence interval:
##  82.93334      Inf
## sample estimates:
## mean of x
##      84.9
```

The result of this test shows that the p-value is less than 0.05. This would mean that the Null hypothesis is rejeted.

Thus, we can conclude that the average customer satisfaction score for Samsung is greater than 75%. This would mean that the samsung average customer satisfaction is minimum 75%

Q2

This question asks for a comparision between the two scores of the customer satisfaction to find if they are significantly different or not.

Inorder to check that, a paired sample t-test has to be done

```
t.test(cusx$`Samsung Score`,cusx$Apple_Score, paired = T)
```

```
##
##  Paired t-test
##
## data:  cusx$`Samsung Score` and cusx$Apple_Score
## t = -1.9016, df = 99, p-value = 0.06013
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -5.9464597  0.1264597
## sample estimates:
## mean of the differences
##                   -2.91
```

Here, as the p-value is greater than 0.05, we accept the null hypothesis

This would mean that the customer satisfaction scores of Samsung and Apple are not significantly different from each other.