

```
###TESTYOURSELF2
```

```
#1.a
```

```
firstWeek <- c(8, 10, 9, 11, 8, 7, 9, 10, 9, 9)
```

```
secondWeek <- c(5, 7, 5, 6, 7, 5, 4, 6, 5, 6)
```

```
t.test(firstWeek, secondWeek, alternative = "greater", paired = TRUE)
```

```
#1.d
```

```
t.test(firstWeek, secondWeek, alternative = "greater", paired = TRUE, conf.level = 0.99)
```

```
#1.e
```

```
t.test(firstWeek)
```

```
t.test(secondWeek)
```

```
#2
```

```
notCoffee <- c(8, 10, 9, 11, 8, 7, 9, 10, 9, 9)
```

```
coffee <- c(5, 7, 5, 6, 7, 5, 4, 6, 5, 6)
```

```
var.test(notCoffee, coffee) #sigma 1 sigma 2 ye e?it mi diye test ettim(ortalama de?il variance a bakt?k)
```

```
t.test(notCoffee, coffee, alternative = "greater", var.equal = TRUE) #H0 = reject
```

```
t.test(notCoffee, coffee, alternative = "greater", var.equal = TRUE, conf.level = 0.99)
```

```
t.test(notCoffee, coffee, alternative = "two.sided", var.equal = TRUE)#kafein t?ketirsek 2.39 la 4.4 aras?nda uyku kayb?na sebep olur
```

```
#3
```

```
stCoffee <- c(6, 7, 5, 5, 7, 5, 3, 6, 6, 6)
```

```
data <- c(notCoffee, coffee, stCoffee) #verileri birle?tirmek i?in
```

```
group <- c(rep(1,10), rep(2,10), rep(3,10)) #veri k?melerinin 10 eleman?n? se?mek i?in
```

```
result <- aov(data ~ as.factor(group))
```

```
summary(result) #Pr(>F) p value'ya e?ittir. at least one of the groups is different than others  
TukeyHSD(result)
```

```
#4
```

```
x <- runif(100, 0, 10)
```

```
y <- 2 + 3*x + rnorm(100)
```

```
cor.test(x,y)
```

```
model <- lm(y~x)
```

```
summary(model)
```

```
#katsay?lar?n sonunda y?ld?z varsa, o katsay?lar modelde bulunmal? demek
```