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REGNO: SCM 223-0151/2019

TITLE: SQC ASSIGNMENT 1

UNIT CODE: STA 2307

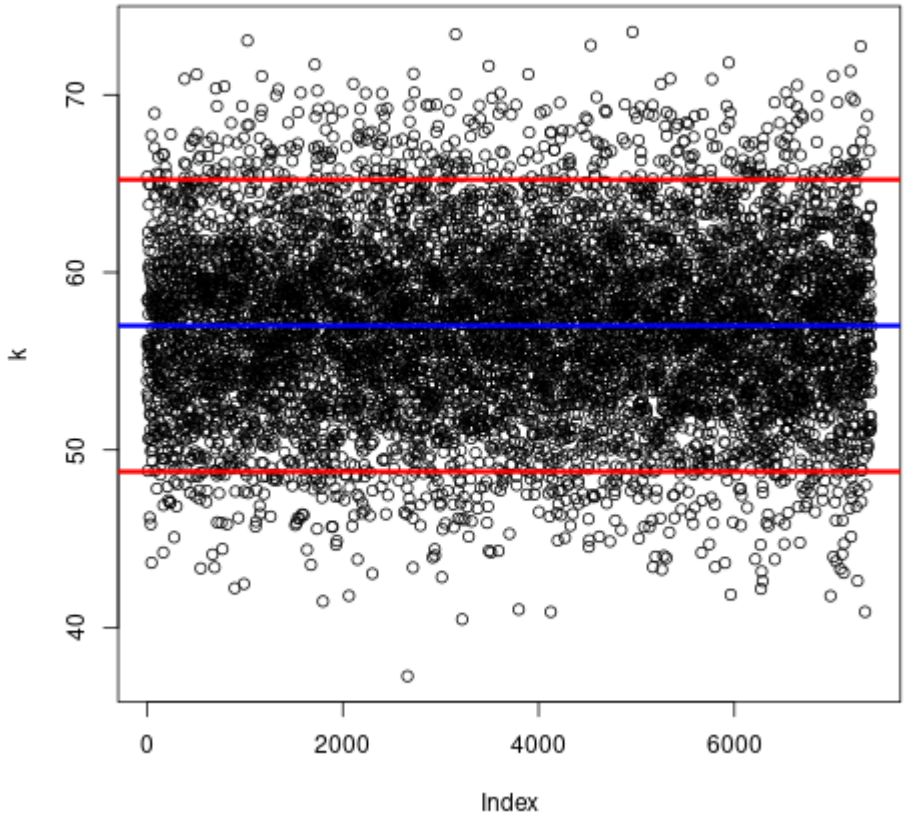
```
# let v denote the total sample
v <- 7401
v
k <- rnorm(v,mean=57,sd=5)
plot(k)
# upper class limits
UL <-  qnorm(0.95,mean=57,sd=5,lower.tail=TRUE)
# lower class limit

LL <- qnorm(0.95,mean=57,sd=5,lower.tail=FALSE)

abline(h=57, col="blue",lwd=3)
abline(h=LL, col="red",lwd=3)
abline(h=UL, col="red",lwd=3)
iqr = UL - LL #Or use IQR(data)
# we identify extreme outliers
extreme.threshold.upper = (iqr * 3) + UL
extreme.threshold.lower = LL - (iqr * 3)

points_above = which(k> extreme.threshold.upper)
points_below = which(k < extreme.threshold.lower)
length(points_above)
length(points_below)
```

PLOTS RESULTS


k
70
60
50
40
0
2000
4000
6000
Index