

## Lab 6: Five Number Summaries and Two Means Comparison

Issue the command `df<-data.frame(PlantGrowth)`. Our goal is to see if Treatment2 helped plant growth compared with the Control group.

1a Give five number summaries and the IQR of plant growth in Treatment2 and the Control Group. Make side-by-side boxplot (Don't generate two separate plots on top of each other), that summarizes these twelve numbers. Whatever functions you decide to use for the 5 number summary, don't worry about options - just use defaults. (Use `names=c("name1", "name2")` to label groups in your boxplot ).

1b Suppose we want to test the null hypothesis that the two treatments have the same effect, against the alternative that treatment2 is better. Calculate your standardize test statistic, give its p-value (according to normal distribution even though it is actually a t-stat) and finally, state your conclusion. (The SE for the test statistic, unlike for proportions, assume different variances of the two groups rather than pooled (see day10 slide 10)).