**R Studio Regression**

Save “Capacity R Studio” file from Github or R Test Folder in O:Drive

Import the data in R by using read.table:

Capacity <- read.table("Capacity R studio.csv", header = TRUE,

sep = ",",

stringsAsFactors = FALSE)

The name to the left of the arrow is what the data will be stored in R as. “Header=TRUE” tells R to keep the existing headers titles from file. “sep = “,”” tells R that it is a CSV file. “stringsAsFactors = FALSE”, lets R know that there are multiple variables within the imported file.

Can also use read.csv (“Capacity R studio.csv” , stringsAsFactors = FALSE) . This is format automatically sets header and sep so it does not need to be input for importing.

Now the information is on R, the regression can be run:

Regression<- lm(Cap~ X.Grade + X.HV, data=Capacity)

Summary(Regression)

Data=Capacity must be included to let R know that these are separate variables within the file.

Capacity$Cap could be used instead, it is like inputting Capacity.Cap in C# and would have to be done for each individual variable within the dataset that was imported.

Resulting Output:

Residuals:

Min 1Q Median 3Q Max

-197.187 -26.693 0.133 31.723 132.960

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) 1944.2133 8.8807 218.927 < 2e-16 \*\*\*

X.Grade -8.9267 1.4042 -6.357 2.44e-09 \*\*\*

X.HV -2.3227 0.5617 -4.135 5.94e-05 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 48.64 on 147 degrees of freedom

Multiple R-squared: 0.2812, Adjusted R-squared: 0.2715

F-statistic: 28.76 on 2 and 147 DF, p-value: 2.879e-11