DA5020.A1.NOAH.DCRUZ

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### Question 1

### A dataframe is a table like structure that has columns(variables) and rows(data points or observations)

s <- data.frame(ID = 1:3, Name = c(“N1”,“N2”,“N3”),height=c(60,70,80))

s

### Question 2

cars <- c(“Truck”,“Car”, “SUV”) mpg <- c(11, 30, 24) cost <- c(45000,25000,35000)

df <- data.frame(cars, mpg, cost)

print(df)

### Question 2a

df[1,3] df[1:3,] df[,ncol(df)]

### Question 3

head(mtcars,3) tail(mtcars, 5)

### Question 4

## Firdt one is categorical and second is continuous

str(mtcars) cat <- c(“vs”,‘gear’) con <- c(“drat”,“wt”) print(cat) print(con)

### Question 5

### ggplot(mtcars, aes(x-disp, y=mpg)) This is an error: could not find function ggplot

### geom\_point is missing

install.packages(“ggplot2”) library(ggplot2)

ggplot(mtcars, aes(x=disp, y=mpg)) + geom\_point()

###Question 6

data(mpg) ggplot(data = mpg, aes(x=displ, y=hwy, color = factor(cyl))) + geom\_point() + labs(color=‘Cylinders’) ### leaving my comments here ### There seems to be a inverse/negative relationship between displ and hwy. As displ goes up hwy goes down. ### Each cylinder has varied hwy and displ

### Question 7

ggplot(data = mpg, aes(x=displ, y=hwy, color = factor(cyl))) + geom\_point() + facet\_wrap(~drv) + labs(color=‘Cylinders’)

### Rear wheel drives have more cylinders, have larger displ and lower hwy

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

summary(cars)

## speed dist   
## Min. : 4.0 Min. : 2.00   
## 1st Qu.:12.0 1st Qu.: 26.00   
## Median :15.0 Median : 36.00   
## Mean :15.4 Mean : 42.98   
## 3rd Qu.:19.0 3rd Qu.: 56.00   
## Max. :25.0 Max. :120.00

## Including Plots

You can also embed plots, for example:



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.