HOMEWORK Data. Table / Tidyverse Coding

Instructions: Submit an Rmarkdown file and a Word file that shows all required code and output.

library(tidyverse) library(dplyr) library(data.table)

1) Use data.table coding to read in data from the College Data excel spread sheet. Assign the data imported to the variable **CollegeData**

2) Now use tidyverse coding to read in the College Data excel spread sheet. Assign the imported data to the variable **CollegeDatatd**

3) Use R coding (of your choice) to determine how many rows and columns the **CollegeData** table has.

4) Use data.table coding to select the variables INSTNM, SAT\_AVG, and ADM\_RATE.

5) Use tidyverse/dplyr coding to select the variables INSTNM, SAT\_AVG, and ADM\_RATE.

6) Use data.table coding and the **CollegeData** data table to only show data for institutions that have admission rates that are less than 20 percent and SAT averages that are greater than 1500. Your data.table output should show five institutions that satisfy these conditions.

7) Use data.table coding to show observational data (values for all 12 variables for American University. In particular, what is the admission rate and SAT average for American University.

8) For the **CollegeData** data frame, Use and show data.table coding that will produce the first fifteen observational rows, the column variable AGE\_ENTRY ordered from highest to lowest. Also, your table only has the column variables INSTNM and AGE\_ENTRY. Assign your coding to the variable **fifteen**.

9) Now using R coding of your choice, find the minimum, maximum, 1st and 3rd quartiles, the mean, and the median for the variable AGE\_ENTRY. Make sure that AGE\_ENTRY is defined as numeric. Convert the variable to numeric if needed.

10) For the **CollegeDatatd** data frame, Use and show tidyverse/dplyr coding that will produce fifteen observational rows. Your table should only have data for the variables INSTNM and AGE\_ENTRY. Also, the column variable AGE\_ENTRY is to be ordered from highest to lowest. Your table result should be the same as for # 8.