## **Exam Description and Questions**

The mid-term exam tests their ability of working with data structures and working with the Pandas library, specifically Pandas Data-frames.

For the mid-term exam the students will be asked to launch their terminal, activate their virtual environment and accomplish the following tasks:

- Make and print out a dataframe of the total points, total games played and minutes per game of James Harden, Anthony Davis, Lebron James, and Damian Lillard. Your index labels should be the NBA Player names. Your column names should be the respective category names.
- 2) Print out the Total Points column
- 3) Add a total minutes column to your dataframe using the minutes per game and games played column. Print your dataframe.
- 4) Add a points per game column to your dataframe using the total points and total minutes columns. Print your dataframe.
- 5) Print out your current dataframe with only those players who had more than 45 points per game.

## **Rubric:**

The students must take a screenshot of Terminal and save it in their ~/Documents/your\_name folder. Immediately after the exam I will look at the pictures and grade their exams.

The exam will be graded on the following scale.

- 1) Dataframe (40)
  - 1) 20 points for creating the dataframe
  - 2) 5 points for using the right numbers
  - 3) 5 points for using the right labels and column
  - 4) 5 points for using the right column names
  - 5) 5 points for correct spelling
- 2) Total Points Column (20)
  - 1) 20 points for printing out co
- 3) Total Minutes Column (20)
  - 1) 10 points for printing it out
  - 2) 10 points for data correct
- 4) Add Points Per Game (20)
  - 1) 10 points for printing out
  - 2) 10 points for being correct
- 5) Print out dataframe of only players (20)
  - 1) 10 points for printing out
  - 2) 10 points for printing out correct

I will deduct 5 points off your score for anytime you need my help to progress or if you speak to another classmate (which is not allowed).