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CS 021H
Final Project Explanation

For my final project, I wrote a program that takes in all of the qualifying Red Sox batters (min 30 ABs) from the 2020 season and their stats and salaries. The program reads in this information and then generates a report giving a list of important stats, including 2 of which I created. They are K-Adjusted Offensive Rating (KOR), and Cost Of Offense Provided (COOP), and the equations for both are below.

KOR = ((OBP + SLG) * 1000) - ((K% * 100)^1.5)
COOP = $\sqrt{Salary}$ /KOR

The higher the KOR value of a player is the better, and the lower the COOP value the better. Here is a table showing how good a specific COOP value is, or how good of a value that player is for the Red Sox.

COOP	Rating
<0.5	Great
0.5 <= x < 2.0	Good
2.0 <= x < 4.0	Average
>4.0	Bad

How To Run Program:

1. Type in redsox_batters.txt for the file to open
2. Type in offensive_report.txt for what file to write a report to, although you can type whatever you want if you so desire another name.