Mean vs. Median: Best Measure of Central Tendency
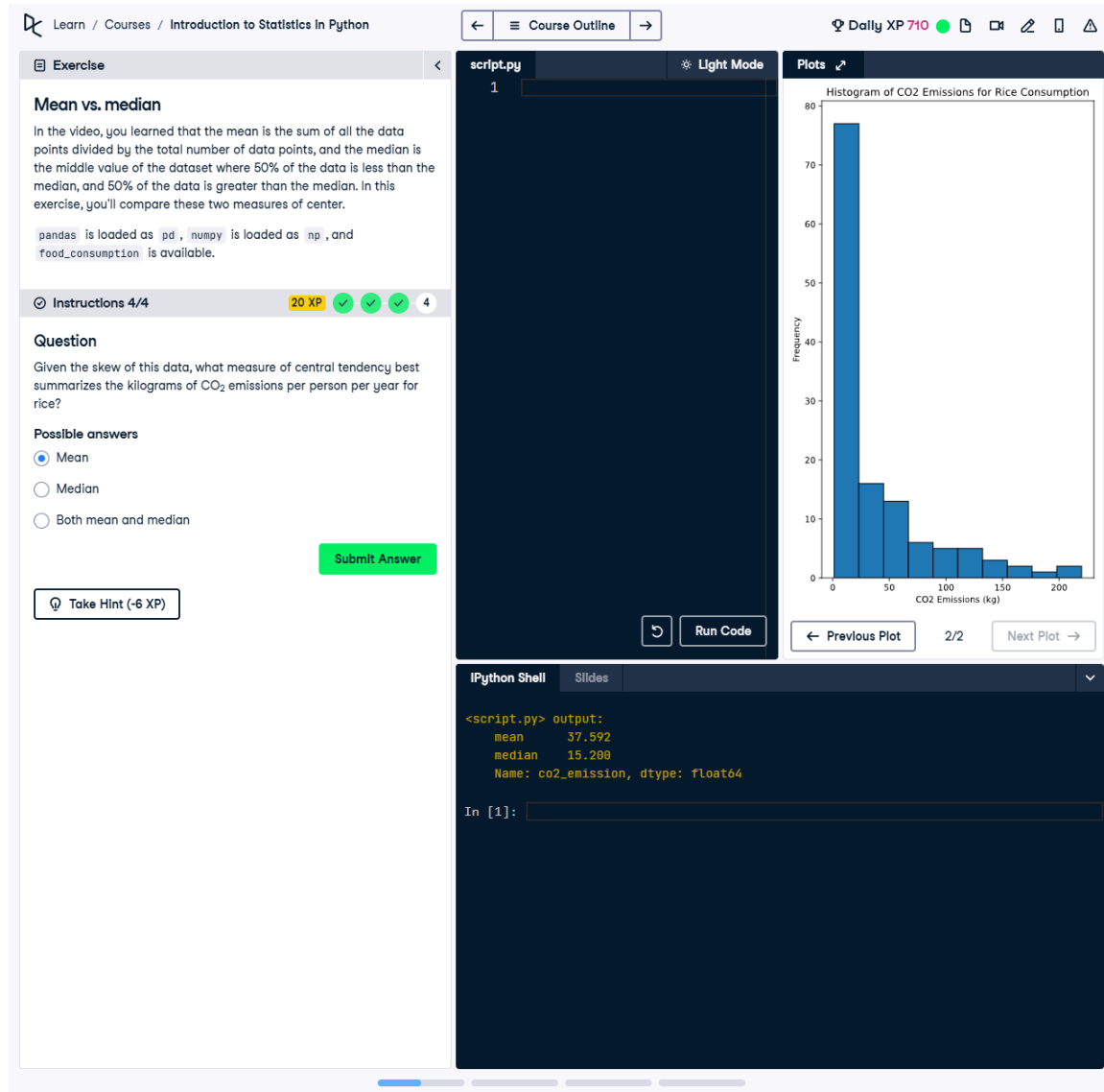

Figure 1: Screenshot showing the histogram and task to identify the best measure of central tendency.

Question

Given the skew of this data, what measure of central tendency best summarizes the kilograms of CO2 emissions per person per year for rice?

Possible Answers:
1. Mean
2. Median

3. Both mean and median

Correct Answer
Median

Explanation

In right-skewed data, such as the CO2 emissions for rice consumption, the mean is heavily influenced by extreme values (outliers) on the higher end of the distribution. As a result, the mean does not accurately represent the center of the data.

The median, being the middle value when the data is ordered, is less affected by these outliers. It provides a better representation of the central tendency for skewed distributions, making it the preferred measure in this case.