

Case Study Chapter 1-3 Test Worth 20 bonus points to the test (Due 10-24-2022)

Take your favorite musical artist and look at their first 3 albums (note they must have at least 3 full-length albums). Take each song on the album and find its length in seconds (See the example for the Beatles on the back).

Complete the following information for your artist.

- A. Determine the median song length of each album.
- B. Construct a graph with the album name on the horizontal axis and the median song length on the vertical axis. Interpret your graph, keeping in mind that the albums are ordered by the release date.
- C. Determine the range of song lengths for each album.
- D. Construct a graph with the album name on the horizontal axis and a range of song lengths on the vertical axis. Interpret your graph.
- E. Find the quartiles of song length for each album.
- F. Determine the IQR of song lengths for each album.
- G. Construct a graph with the album name on the horizontal axis and IQR of song lengths on the vertical axis. Interpret your graph.
- H. Find the lower and upper limits of song length for each album. Use them to identify potential outliers.
- I. For each album, construct a boxplot of the song lengths, and interpret your results in terms of the variation of the song lengths.

PPM	WTB	HDN
110	108	109
112	119	119
119	124	131
124	128	132
125	129	135
125	133	140
142	136	140
144	147	144
146	149	152
147	152	153
153	156	158
158	167	158
175	167	166
177	182	