LAB 04 - STATISTICAL ANALYSIS OF SHOT PUT DATA

Mr. Fitzgerald has provided some data from his track and field athletes, specifically, his shot put throwers. In this LAB, you will be required to complete a statistical analysis of the data to determine which thrower is the "best" thrower on the team.

PART 1 - STATISTICAL ANALYSIS

Your statistical analysis will include the following components:

(a) Using interval widths of 0.5 meters, create a frequency histogram of the data for each thrower.
(b) Calculate the mean, median, mode for each thrower.
(c) State the five number summary (min, Q1, median, Q3, max) for each thrower.
(d) On a single graph, create a box-and-whisker plot for each thrower that allows you to compare the data from the three throwers.

THE THROWERS' DATA

Thrower #1 Adam Hercules	8.74	8.94	9.66	10.01	10.01	8.43	10.25	10.14	9.04	9.30	8.69
	8.85	9.25	9.46	10.23	8.95	9.65	8.79	10.62	9.78	9.26	9.39
Thrower #2 Iron-Man Minjae	10.39	10.86	10.94	9.00	9.15	9.35	9.35	8.25	8.85	8.95	9.10
	10.20	9.53	8.76	8.03	8.96	9.25	9.98	10.82	10.10	8.96	9.68
Thrower #3 Killer Kenz	8.79	9.39	9.94	11.47	9.72	8.49	9.63	9.49	9.83	8.82	9.24
	9.13	9.56	9.94	9.75	9.12	8.96	8.83	9.25	9.38	9.62	9.98

PART 2 – DECISION MAKING & JUSTIFYING

Once you have completed the required statistical analysis, you must make a decision as to which thrower is the best. First, you must decide upon what it means to "be the best" thrower. Then you will choose who the best and explain WHY you think that they are the best (your reasoning must be STATISTICALLY based!)