**Introductory Video**

**Introduction**

The Boston Marathon is an annual road race that takes place in the city of Boston Massachusetts that attracts thousands of runners of varying skill and experience. Year after year, participants from around the world gather to compete for world records, divisional records, and personal bests. In 2019, Kenyan runner Lawrence Cherono won the race by a matter of seconds, while Worknesh earned the win in the women's division in this prestigious event.

**Motivating Sports Questions**

Is there a statistical difference in means for finishing times for males and females?

Is age related to finishing time?

Which age groups run the fastest and slowest on average?

Does age have different effects on men and women marathon times?

Was the top male or female finisher more remarkable in comparison to their respective fields?

Are the race results normally distributed?

What summary statistics are relevant to examine for finishing time?

Which race times would be considered outliers?

Are there extreme outliers?