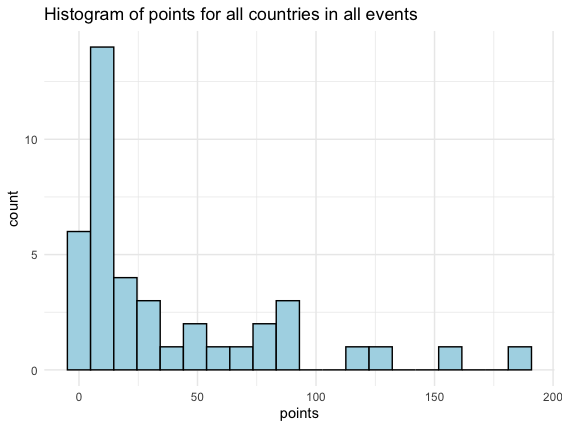
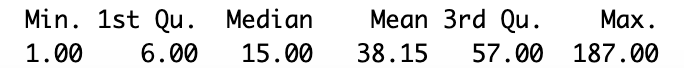
1. The below graphic is a histogram of points for all countries. Describe the distribution of points. Is there a skew, if so, what is it and what does it mean?

The data is right-skewed meaning that the values are clustered around the smaller values for points, so it is more common for nations to get fewer medals in Olympic rowing.

* 1. The summary statistics for points are provided below.



* 1. The below table shows the top 5 nations ranked by points. Using the summary statistics, determine if there are any other outliers.

A table of numbers with text

Description automatically generated

UK is an outlier

IQR = Q3-Q1 = 57-6 = 51

1.5\*IQR = 1.5\*51 = 76.5

Q3 +1.5\* IQR = 57 + 76.5 = 133.5

154> 133.5

USA is an outlier.

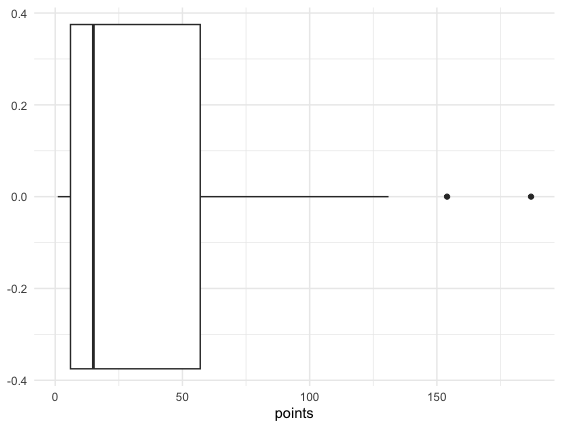
187>133.5

131<133

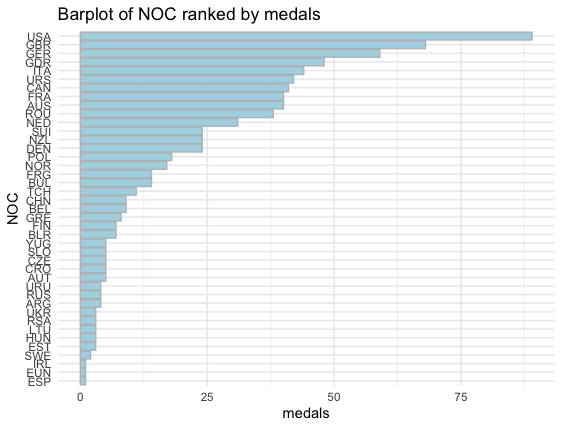
121<133

87<133

1. Using your answer to Question 2 draw a boxplot of points.



1. The below plot shows medals ranked by NOC. Based on the distribution of this plot would it be fair to assume that economic welfare is a confounding variable in predicting nations’ performance in Olympic rowing? Explain why or why not.



Based on this graph it would not be fair to assume that economic welfare is a confounding variable in predicting nations’ performance in Olympic rowing. If there was a GDP variable it may be easier to assess this.

1. In the bar plot in Question 4, notice that the German Democratic Republic (GDR) or East Germany is listed as a country. Since the end of the Cold War the GDR is no longer a country. What would you do with countries in the dataset that are no longer existent today? How would it impact the data?

Open ended, no right or wrong answer, credit for answering.

1. There is a lot of debate about how to best weigh the points for the different types of medals. Read [this link](https://www.topendsports.com/events/summer/medal-tally/rankings-weighted.htm)(https://www.topendsports.com/events/summer/medal-tally/rankings-weighted.htm) about different medal point weighing and decide on a method you think would be best. How would the new method alter the data?

Open ended, no right or wrong answer, credit for answering.