HUDM 5026 - Introduction to Data Analysis and Graphics in R
HW 04 – Functions and Sample Statistics

Instructions.

- Use R Markdown to create an html document with the homework tasks.
- You are encouraged to discuss problems with classmates, but all work you submit must be your own.
- As always, any plots should have appropriate axis and overall labels.

We will continue working with the acupuncture data set we examined in class this week. See the notes for details.

1. Find the minimum (see function `min()`, 1st quartile (i.e., 25th percentile; see function `quantile()`, median (see function `median()`, 3rd quartile (i.e., 75th percentile; see function `quantile()`), and maximum (see function `max()` values of `pk1` and `pk5`.
2. Write a function that calculates the min, Q1, median, Q3, and max values of a vector. Then, apply the function to `age`, `sex`, `migraine`, `chronicity`, `pk1` and `pk5`.
3. Summarize the output from the last item in a table. Use R Markdown to make a table - see here.
4. Write a function that plots a boxplot of a vector and also reports the min, Q1, median, Q3, and max. Then apply the function to `pk1` and `pk5`. Tip: use your function from the last part to help you write this function.