

## A5: US Counties Queries

This assignment asks you to answer a series of questions relating to county-level statistics for the contiguous United States. You will make use of the “us\_counties\_data.csv” dataset. Make sure to read the associated description of the data (“us\_counties\_data\_DESCRIPTION.pdf”) prior to undertaking the assignment. Deliver the results as an HTML webpage generated from an R Markdown or Quarto file. Use headers or text to differentiate each component of the assignment. Make sure to include both the code and answers. When reading in the data, make sure all character columns are treated as factors.

**Q1:** What county has the highest recorded mean elevation? (2 Points)

**Q2:** What state has the lowest mean county elevation? (2 Points)

**Q3:** How many counties have a mean elevation greater than 1,000 meters? (2 Points)

**Q4:** How many counties have a mean elevation greater than 1,000 meters and a percent forest cover greater than 40%? (2 Points)

**Q5:** How many counties have a mean elevation lower than 100 meters and a percent developed larger than 35%? (2 Points)

**Q6:** Which subregion of the country has the largest number of counties? (2 Points)

**Q7:** Which subregion of the country has the highest average county mean annual temperature? (2 Points)

**Q8:** Does Nebraska or Kansas have the highest average county percent cropland? (2 Points)

**Q9:** How many counties have a percent cropland greater than 25%, a mean temperature higher than 10°Celsius, and are not in the West South Central subregion? (2 Points)

**Q10:** Which county in the country has the highest percent cropland? (2 Points)

**Q11:** Which county in the country has the highest percent developed land? (2 Points)

**Q12:** Which subregion has the highest total population? (2 Points)

**Q13:** Which state has a higher percentage of households with internet access (all internet access, not just broadband), West Virginia or North Dakota? (2 Points)

**Q14:** Of all the counties with a mean elevation greater than 1,200 meters, which has the highest total annual precipitation? (2 Points)

**Q15:** What county has the largest difference between its annual lowest and highest temperatures? (2 Points)