**Interview Coding Tasks**

**Note:** Elixir question is simple enough that, even though you may have no experience in it, it can be done with some cursory documentation browsing.

**Tasks (Codecraft, Problem Solving):**

*Be prepared to explain and modify the code during the interview*

1. (Elixir) Create a program in Elixir that returns a list of all numbers from 1 to 100. However, for each number that is divisible by three, return “Div3”. Also, for each number divisible by 5 return “Div5”. For numbers that are divisible by both 3 and 5 the program should return “Div3&5”. Show and explain the operation.
2. (Using tool of choice) Given a CSV file containing some customer’s 5 min load profile, determine the hourly peak demand for each month (peak demand = date and hour of the highest usage during the given time window).
   1. What if their bill goes from the 15th to the 15th of each month?
   2. What if demand is only determined during on-peak hours? (on-peak defined as weekdays, 7AM-8PM) (files: rbhs-campus-load-april-2023-data.csv)
3. (Using tool of choice) Convert 2 given JSON files (weather time series) to CSV time-series. First column should be human-readable datetime (New York timezone).   
   (files: Princeton(40.35,-74.66)-15min-e.json, Wilmington(39.74,-75.55).json)