# Portfolio BI Case Study

Instructions**:** Review the scenarios below and solve to the best of your ability by researching possible solutions and applying your current skillset. Be sure to document your conclusions in a slide format (e.g., Power Point with no more than 10 slides) and prepare to present your findings to the team.

If you are not able to completely solve the scenarios below, please be prepared to walk us through your thought process and make note of unanswered questions you might have.

Scenario 1**:** You have been tasked with analyzing the security price movements of two companies, Corning, Inc. (GLW US) and Nvidia Corporation, Inc. (NVDA US) from 1/1/2015 to 6/30/2015. Please find pricing data.

Please use any data sources you see fit to find and analyze this data.

Using a programming language/framework/stack of your choice, achieve the following to the best of your ability:

* Calculate and report the min, max, and average closing price for each security over the period
* Identify and report the most significant positive spike in the price. Please provide a possible explanation for the spike.
* Calculate the return on investment for 1,000 shares from 1/1/2015 to the date of any one significant price spike. You may choose either security for this exercise.
* Please create a data visualization using a medium of your choice to show the price moves and highlight any abnormal price moves.

Be sure to save and produce your code as you will be asked to present your logic. Provide us with URL of your repository (e.g., GitHub or another provider). Commit often as you can - we want to understand your development process.

Scenario 2**:** A client has provided you with a sample of their holdings and trades data. These two sets of data are related. The client believes that the file reports accurate trade quantity, price, and net proceeds as well as holding end of day quantities and market values, but this is not always the case. The client is transitioning trading systems and wants to reconcile the provided extract to ensure that the information is correct.

* Review the data and find as many issues as you can, including data formatting and calculation issues.
* Ensure trade amounts are reported or calculated correctly. Make note of any discrepancies you find.
* Ensure holdings quantities and amounts are valid and reflect the corresponding trades. Make note of any discrepancies you find.
* Attempt to fix any discrepancies based on the data available in both files. Document your changes.
* Be prepared to present on your workflow and calculations