

Limitations - Written Assignment Requirements

While analyzing anonymously submitted data from gradcafe.com, I encountered significant limitations related to reliability, accuracy, and completeness. The lack of identifying information and standardized formatting made it difficult to validate the authenticity of individual records. Inconsistent entries, missing values, and irregular range patterns were frequent, casting doubt on the trustworthiness of aggregate results.

A few interesting patterns stood out:

- **Term Distribution Disparity:** Out of more than 10K total applicant entries, only 142 applied for Spring 2025, while the vast majority — over 10.5K applicants — applied for Fall terms. This skew is consistent with the academic calendar of most U.S. graduate programs, which traditionally prioritize Fall admissions. However, the relatively small Spring sample size should be treated with caution in comparative analyses due to potential sampling bias.
- **Inconsistent GRE Scores:** A more troubling issue was found in the GRE score distributions. Some GRE scores were listed as 980+, which doesn't make sense for the General Test (scored 130–170). These are likely Subject Test scores entered in the wrong place, which throws off GPA and GRE averages.
- **Trend in GRE Quantitative Scores:** Despite the data issues, there's a mild upward trend in quantitative GRE scores over recent years. While the data is not fully reliable, this pattern may suggest that recent applicants are increasingly competitive, potentially due to heightened academic standards, self-selection among more quantitatively prepared students, or broader access to test preparation resources.