Part 2: Programming Assignment - Questions, answers, and query descriptions

1. How many entries do you have in your database who have applied for Fall 2025?
Answer: 4590
Query description: Query counts all rows using a WHERE clause to filter only Fall 2025 term.

2. What percentage of entries are from international students (not American or Other) (to two decimal places)?
Answer: 47.67
Query description: Query counts all rows using a WHERE clause to filter on international applicants and divides by count of all rows to determine percentage.

3. What is the average GPA, GRE, GRE V, GRE AW of applicants who provide these metrics?
Answer: Average GPA: 3.74, Average GRE: 161.39, Average GRE V: 158.45, Average GRE AW: 4.28
Query description: Query uses AVG on appropriate column using WHERE statement to filter out results out of the expected range of GPA and GRE scores.

4. What is their average GPA of American students in Fall 2025?
Answer: 3.76
Query description: Query uses AVG on gpa column using WHERE clause to filter only American applicants

5. What percent of entries for Fall 2025 are Acceptances (to two decimal places)?
Answer: 35.90
Query description: Query counts rows filtering for acceptance by using WHERE clause for status LIKE Accepted as wildcard to filter for all acceptances and WHERE clause to filter only Fall 2025 and divides by count of all rows to determine percentage acceptance for the term.

6. What is the average GPA of applicants who applied for Fall 2025 who are Acceptances?
Answer: 3.75
Query description: Query uses AVG on gpa column using WHERE clause for Fall 2025 and LIKE Accepted as wildcard to filter for acceptances.

7. How many entries are from applicants who applied to JHU for a masters degrees in Computer Science?

Answer: 4

Query description: Query counts rows using WHERE statement to filter JHU as the llm-generated university, computer science as the llm-generated program, and Masters as the degree.

8. How many entries from 2025 are acceptances from applicants who applied to Georgetown University for a PhD in Computer Science?

Answer: 0

Query description:Query counts rows using WHERE statement to filter Georgetown as the llm-generated university, computer science as the llm-generated program, PhD as the degree, and LIKE Accepted as wildcard to filter for acceptances.

Additional questions:

9. Which university had the most applicants for Fall 2025?

Answer: University of California, Davis

Query description: Query counts rows from llm-generated university column using WHERE to filter by Fall 2025, and uses an ORDER BY DESC to find university with largest count.

10. What is the average GPA for Acceptances to the University of Virginia versus Virginia Tech for Fall 2025?

Answer: The University of Virginia (gpa = 3.76) had a higher average GPA than Virginia Tech (gpa = 3.48) for Fall 2025 Accepted

(Go Hoos!)

Query description: Query uses AVG on gpa column and WHERE clause to filter UVA and VT, respectively, and WHERE to filter for Fall 2025 and LIKE Accepted as wildcard to filter for acceptances.