**Additional Assignment Questions for Student University Management Case Study**

**Concepts**: Advanced filtering techniques using WHERE, GROUP BY, HAVING, IS NULL, IS NOT NULL, LIKE, and other SQL constructs.

**Note**: Use the same case study(University Management) tables to write these queries.

**Assignment Questions**

1. Write a query to find students whose first names start with the letter 'A' and who are enrolled in at least one course, using the LIKE operator and IS NOT NULL.
2. Write a query to list departments where the department name contains 'Science' and the number of students is greater than 5, using LIKE, GROUP BY, and HAVING.
3. Write a query to identify courses with no assigned department (i.e., DepartmentID is NULL) and display their course names and credits.
4. Write a query to find professors whose last names do not contain the letter 'e' and who are associated with a department, using LIKE and IS NOT NULL.
5. Write a query to list students who have never received a failing grade ('F') in any course, using a subquery and NOT LIKE.
6. Write a query to display the total number of credits offered by each department, but only for departments with at least one course, using GROUP BY, HAVING, and IS NOT NULL.
7. Write a query to find enrollments where the grade is not null and the enrollment date is within the year 2024, using IS NOT NULL and WHERE.
8. Write a query to list students who are not enrolled in any courses and whose date of birth is not null, using IS NULL and IS NOT NULL.
9. Write a query to identify courses where the course name contains 'Data' and the average grade of enrolled students is above 3.0, using LIKE, GROUP BY, and HAVING with a CASE statement for grade conversion.
10. Write a query to find professors who are department heads and whose first names start with 'J' or 'M', using LIKE and a subquery.

**Instructions**

1. Use advanced filtering techniques (WHERE, GROUP BY, HAVING, IS NULL, IS NOT NULL, LIKE) as specified in each question.
2. For grade-related calculations (e.g., question 9), assume a standard grading scale (A=4.0, B=3.0, C=2.0, D=1.0, F=0.0) and use a CASE statement to convert letter grades to numeric values.
3. Ensure queries handle edge cases (e.g., NULL values) appropriately.