Germell

The data that would be collected for Aurora University’s database is entirely based on staff and student enrollment. The relative information revolves around athletic sports, organizations/clubs, and campus buildings (including room and board). Establishing relationships between each category of data gathered, whether one-to-one, one-to-many, or many-to-many is best done before any implementation within SQL. Understanding what information could be seen as redundant is good practice, resulting in simplification and an effectively constructed database. Aurora University being just a private institution with low enrollment and quite the underwhelming campus life, makes for a somewhat minimalistic design in the system. Sure, a lot of information, but not so much a complex structure. Aurora University would own the database. Perhaps a few elected computer science majors should be allowed to maintain the server, under direct supervision of the computer science board of professors, as means for educational development. The only individual with admin access, should be the database manager, likely to be a professor.

* Write 17 questions the business/organization might ask (in human) and then provide an SQL statement that would provide your answer.

1. How many total students enrolled?
   1. Select stu\_FName, stu\_LName, Student\_ID from Students

Where Account = Active;

1. Who are the nursing majors and professors?
   1. Select stu\_FName, stu\_LName, Student\_ID from Students

Where Program = Nursing;

* 1. Select pro\_FName, pro\_LName, Professor\_ID from Professors

Where Program = Nursing;

1. How much did tuition cost last semester?
   1. Select total\_cost from Tuition

Where semester = SPR20;

1. How many students received financial aid?
   1. Select stu\_FName, stu\_LName, Student\_ID from Students

Where FAFSA = complete;

1. What students made the dean’s list this semester?
   1. Select Student\_ID from DeanList

Where semester = FA21;

1. How many dorms are currently available?
   1. Select dorm\_rooms from Campus;

Where occupied = null;

1. What is the list of campus buildings?
   1. Select buildings from Campus;
2. How many classrooms are being used in the institute of collaboration?
   1. Select classrooms from Campus

Where location = ICE;

1. What are the number of students on academic leave?
   1. Select stu\_FName, stu\_LName, Student\_ID from Students

Where academic\_leave = yes;

1. How many students dropped out this semester?
   1. Select stu\_FName, stu\_LName, Student\_ID from Students

Where dropped = yes;

And semester = FA21;

1. How many students graduated this semester?
   1. Select \* student\_ID from GraduationPool

Where semester = FA21;

1. How many students failed this semester?
   1. Select \* student\_ID from Academic\_Record

Where Grades = F;

1. How many new hires this semester?
   1. Select \* student\_ID And professor\_ID from Employment

Where Applicants = accepted

And semester = FA21

And employ = active;

1. How many resignations this semester?
   1. Select \* student\_ID And professor\_ID from Employment

Where employ = resigned

And semester = FA21;

1. What class is dropped the most?
   1. Select class\_ID from DroppedPool;
2. How many students are in class CSC4500?
   1. Select \* students\_ID from Academics

Where class\_ID = CSC4500

And semester = FA21

And dropped = null

And withdrawn = null;

1. What the classes are being taught by “said professor” this semester?
   1. Select \* class\_ID from ProfessorPool

Where professor\_ID = “said id”

And semester = FA21;