

Student Name:

CS3431: Database Systems I
C-Term 2013, Quiz 1

Design an Entity-Relationship Diagram (ERD) for a **car race database** with the following requirements.

- We have cars, for each car we keep its VIN number (unique ID), engine type, color, make, and model
- We have drivers, for each driver we keep ID (unique), name, DoB, age
- Drivers use cars to enter races, each race has some attributes such as the race number (unique ID), race type, the number of rounds, and date.
- Each driver can enter many races and can use the same car or different one in each race. Thus the same car can participate in many races.
- In the design, we want to capture which car is used by which driver and in which race.
- We also need to capture the winner of each race (the driver who won the race) and the winning time (the time taken to finish and win the race).