Formula One Normalization Diagram and Relational Algebra

Lee Phonthongsy

View All Races – Relational Algebra

$Q \leftarrow \pi$ RACE.Date, RACE.Name, CAR.Maker, CAR.Model, CAR.Driver, SCOREBOARD.Points (SCOREBOARD $\bowtie_{CarID = CarID}$ CAR) $\cap$ (SCOREBOARD $\bowtie_{RaceID = RaceID}$ RACE)

All Constructors View – Relational Algebra

$Q \leftarrow \pi$ CONSTRUCTOR.ConstructorID, CONSTRUCTOR.Name, CONSTRUCTOR.Principal, CONSTRUCTOR.EmailAddress (CONSTRUCTOR)

View Top 3 Constructors – Relational Algebra

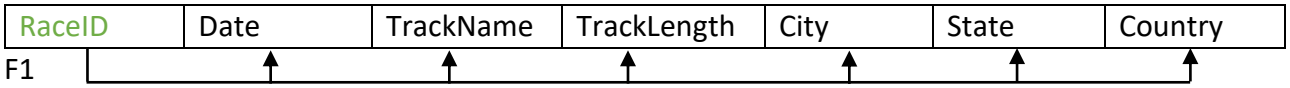
$Q \leftarrow \pi_{CONSTRUCTOR.Name, \Im SUM (SCOREBOARD.Points)}$ ((SCOREBOARD $\bowtie_{CarID = CarID}$ CAR) $\cap$ (CAR $\bowtie_{ConstructorID = ConstructorID}$ CONSTRUCTOR))

View Top 3 Drivers – Relational Algebra

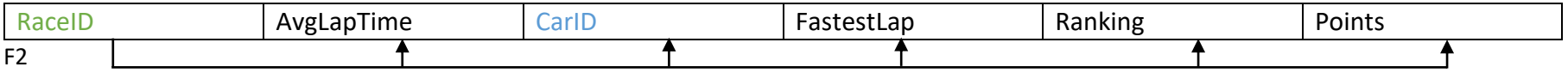
$Q \leftarrow \pi_{CAR.Driver, CAR.Maker, CAR.Model, CONSTRUCTOR.Name, \Im SUM (SCOREBOARD.Points)}$ ((SCOREBOARD $\bowtie_{CarID = CarID}$ CAR) $\cap$ (CAR $\bowtie_{ConstructorID = ConstructorID}$ CONSTRUCTOR))

Formula One Normalization Diagrams

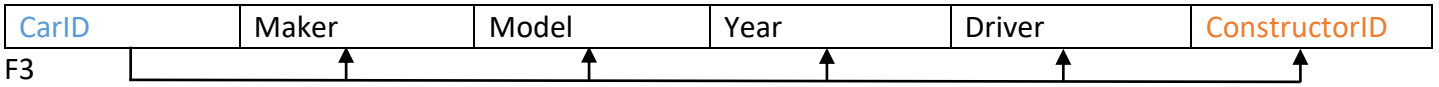
RACE



SCOREBOARD



CAR



CONSTRUCTOR