Swim's RA Solution (Spring 2017)

(a) $\pi_{\text{FName, LName, EMail}}(\text{Swimmer})$

(b) $\pi_{\text{LevelId, StartDate}}(\sigma_{\text{SwimmerId=2}}(\text{LevelHistory}))$

(c) $\pi_{\text{FName, LName}}(\sigma_{\text{MeetId=10}}(\text{Meet}) |x| \text{Coach})$

(d) $\pi_{\text{EventId, Title, Comment, FName, LName}}(\text{Event} |x| \rho_{\text{CoachId/CommentCoachId}}(\sigma_{\text{SwimmerId=4}}(\text{Participation})) |x| \text{Coach}))$

Note that it is necessary to rename CommentCoachId before the natural join. If not, it becomes a Cartesian product.

(e) $\pi_{\text{FName, LName}}(\text{Swimmer} |x| (\sigma_{\text{EventId <> EventId\_2}}(\pi_{\text{SwimmerId, EventId}}(\text{Participation}) |x| (\rho_{\text{EventId\_2/EventId}}(\pi_{\text{SwimmerId, EventId}}(\text{Participation}))))))$