 In His Name

Jafari

Faghih

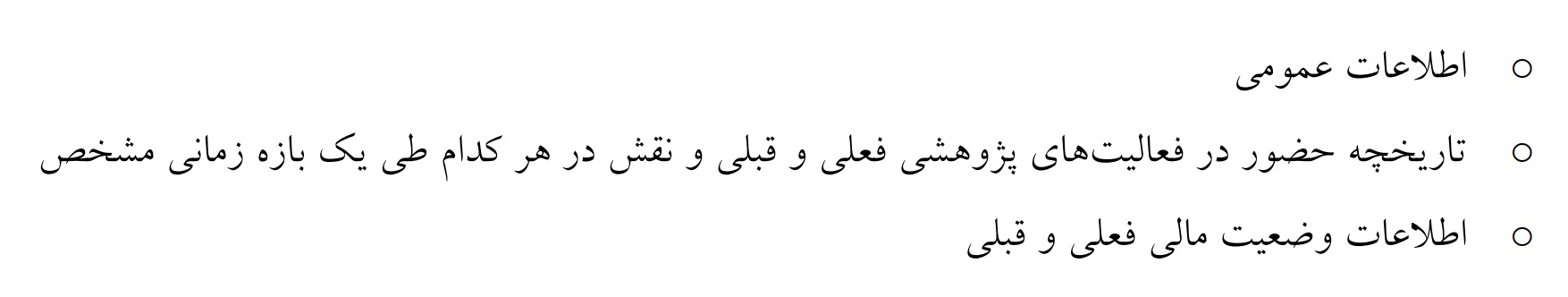
Imani

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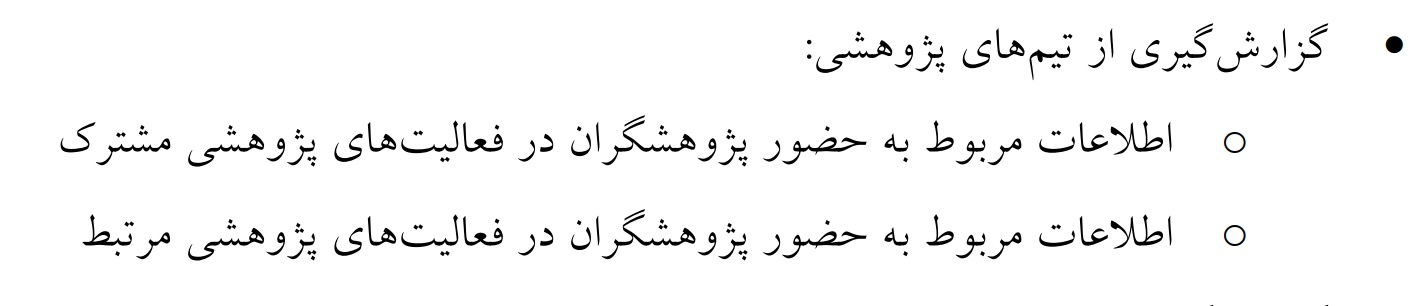
Relational algebra

* All joins are natural joins unless speicified

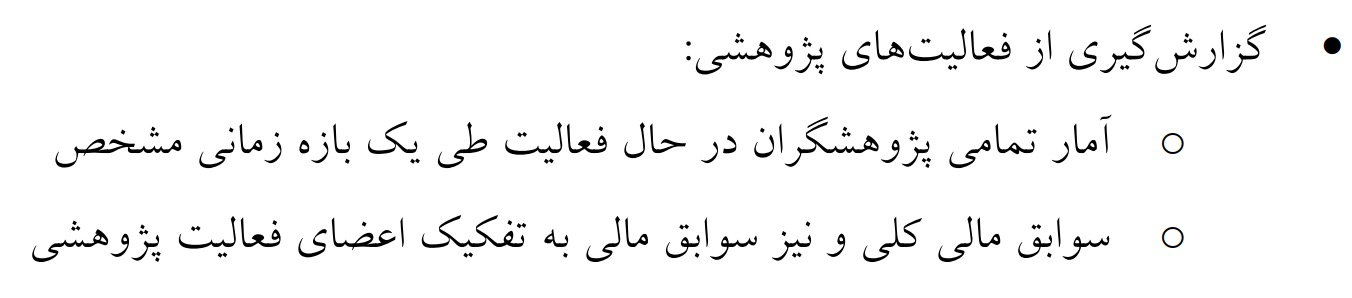
1. πFname, Lname, InstID ((Agreement ∞ Researcher) ∞ RA) ∞ σ(Name = input) Institute
2. π(σ(Name = input) Finances)
3. π (Name, instID, Topic) ((RA ∞ Topics) ∞ institute)
4. π (Name, instID, ACT-ID) (RA ∞ Institute)



1. π (FName, Lname, RID, fav\_field) (Researcher)
2. π (RID, Fname, Lname, RID, Role) (Researcher ∞ σ (start\_date>input1 and end\_date<input2) Agreement ∞ RA)
3. π (Fname, Lname, RID, TRID, Amount) (Researcher, Transaction)



1. π (Fname, Lname, RID, ACT-ID) (Researcher ∞ Agreement ∞ σ (ACT-ID = x) RA)
2. π (Fname, Lname, RID, Topic) (Researcher ∞ Agreement ∞ (RA ∞ σ (Topic = x) Topic))



1. π (FName, Lname, ACT-ID, RID) (σ (Start\_date > input1 and End\_date < input2) (Researcher ∞ Agreement ∞ σ (ACT-ID = X) RA))
2. π (LoanValue, DonationValue, Amount, NUM) (Transaction ∞ σ(ACT-ID = x) RA ∞ Funding) -(kolli)
3. π (RID, Amount, NUM) (Researcher ∞ Transaction ∞ σ (ACT-ID = x) RA) --(tafkik aaza)