Andrew Plum

Professor Jamil

CS 360

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Assignment #5

1)

τ(Name,TypeofPet)(∏(PetID,Name,TypeofPet)(σ(City="Moscow"∧State="Idaho")((Pets)⋈(Owns)⋈(∏(OID)(σ(Age<18∧AnnualIncome=0)(Owners))))))

2)

∏(OID,LastName,PetID,Name)((Pets)⋈(Owns)⋈(∏(OID,LastName)((Owners)⋈(Purchases)⋈(∏(FoodID,Price,TypeofFood)(Foods))-(∏(FoodID,Price,TypeofFood)(σ(TypeofFood=f4∧Price<f5)((Foods)⋈(ρ(Foods)(f1,f2,f3,f4,f5,f6,f7)(Foods))))))))))

3)

∏(PetID,Name)((Pets)⋈(∏(Name)(σ(`count(Name)`=50)((∏(count(Name),Name)(σ(Name=a2∧State≠a7)((Pets)Χ(∏(a2,a7)(ρ(Animals)(a1,a2,a3,a4,a5,a6,a7,a8)(Pets))))))))))

4)

∏(Brand)((Foods)-(Foods)⋈(∏(FoodID)(σ(ClassofFood=f7∧Price<f5)((Foods)⋈(ρ(Foods)(f1,f2,f3,f4,f5,f6,f7)(Foods))))))

5)

∏(FoodID,Brand,Price)((Foods)-(Foods)⋈(∏(FoodID)(σ(Brand=f3∧Price<f5)((Foods)⋈(ρ(Foods)(f1,f2,f3,f4,f5,f6,f7)(Foods))))))