Ata Seren

21901575

Section-2

Homework 1 Answers

Q1)

1. Names of the instructors that teaches CS102 in 2022 Spring semester.
2. Names of the all instructors except instructors who teach a CS course in 2022 Spring semester.
3. Number of instructors that teach the same CS course in Spring 2022 semester for each CS course.
4. Name of the course that has been taught by more instructors than other courses

Q2)

1. ΠTitle(sCity=”Ankara”(Theater)⨝ sDate ≥ 01.01.2021 Λ Date ≤ 31.12.2021(Schedule))
2. ΠTName(sCity=”Ankara”(Theater)⨝Schedule⨝sYear=”2021”(Movie))
3. ΠTName(sCity=”Ankara”(Theater)⨝Schedule⨝sYear=”2021”(Movie)) - ΠTName(sCity=”Ankara”(Theater)⨝Schedule⨝sYear≠”2021”(Movie))
4. ΠTicketPrice(sRating > 4.0(Movie)⨝ s Date ≥ 01.02.2022 Λ Date ≤ 28.02.2022 (Schedule) ⨝ sCity=”Ankara” (Theater))
5. ΠName, Byear(sRating > 2.5 Λ Year=”2021”(Movie)⨝ Acts ⨝ Actor)
6. ΠName(sRating > 3.0(Movie)⨝ sDate ≥ 01.01.2021 Λ Date ≤ 31.12.2021(Schedule) ⨝ sCity=”Ankara”(Theater) ⨝ Acts ⨝ sByear < 1972 (Actor))
7. P1 🡨 ΠTitle(Movie ⨝ Acts ⨝ sName=”Anthony Hopkins”(Actor))

ΠTName ((Schedule ⨝ sCity=”Ankara” (Theater))/P1)

1. P2 🡨 ΠTitle(Movie ⨝ Acts ⨝ sName=”Jodie Foster”(Actor))

ΠTName(Schedule ⨝ sCity=”Ankara”(Theater)) –

ΠTName(Schedule ⨝ sCity=”Ankara”(Theater) ⨝ P2)

1. Schedule 🡨 ΠTName, Title, Date, Time, TicketPrice\*1.1(Schedule⨝ sCity=”Ankara”(Theater)) ∪ ΠTName, Title, Date, Time, TicketPrice(Schedule⨝ sCity≠”Ankara”(Theater))
2. mvs 🡨 sYear=”2021”(Movie)

notBest 🡨 Πp1.Title(ρp1(mvs)⨝p1.Rating < p2.Rating ρp2(mvs))

ΠTitle(mvs) - notBest

1. Best 🡨Gmax(Rating)( sYear=”2021”(Movie))

ΠTitle(Best⨝ sYear=”2021”(Movie))

1. Year G max(Rating)(Movie)
2. Temp1 🡨 Year G count(\*) as cnt(Movie)

ΠYear (Gmax(cnt) as cnt (Temp1) ⨝Temp1)