Relational algebra

Exercises on Relational Algebra

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TOUR-GUIDE (GuideCode, Name, Surname, Nationality)
TYPE-OF-TOUR (TourTypeCode, Monument, Duration, City)
GROUP (GroupCode, NumberOfParticipants, Language)
GUIDED-TOUR-CARRIED-OUT (GroupCode, Date, StartTime, TourTypeCode, GuideCode)

⇒ For each Italian tour guide who has only guided types of tours lasting more than 2 hours, show name and surname of the guide.

TOUR-GUIDE (<u>GuideCode</u>, Name, Surname, Nationality)
TYPE-OF-TOUR (<u>TourTypeCode</u>, Monument, Duration, City)
GROUP (<u>GroupCode</u>, NumberOfParticipants, Language)
GUIDED-TOUR-CARRIED-OUT (<u>GroupCode</u>, <u>Date</u>, <u>StartTime</u>, TourTypeCode, GuideCode)

⟫ Show surname and nationality of the guides who have guided *all* types of tours.

STUDENT(StudentID, Name, Surname, DegreeCourse)
LABORATORY(LabID, LabName, Capacity)
DEVICE(DeviceID, DeviceName, Type, LabID)
EXPERIMENT(DeviceID, StudentID, Date, Description, Category)

⟫ Show the name of laboratories with a capacity greater than 10 people, where at least 2 experiments were performed on the same day with devices of type *'video camera'*.

TEENAGER(SSN, Name, Surname, BirthDate, CityOfResidence, Sex)
ACTIVITY(ActivityCode, AName, Description, Category)
SUMMER-CAMP(CampCode, CampName, City)
SUBSCRIPTION-TO-ACTIVITY-IN-SUMMER-CAMP(SSN, ActivityCode, CampCode, SubscriptionDate)

⟫ Show the name and surname of the teenagers who subscribed on the same date (*SubscriptionDate*) to at least two different activities, which are organized by two distinct summer camps located in the same city.

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