

/\*1.a

Show SSN, name and surname of every personal trainer who gave group lessons in at least 3 different gyms located in Turin.  
\*/

```
SELECT SSN, Name, Surname
FROM TRAINER
WHERE SSN IN
    (
        SELECT SSN
        FROM GROUP_LESSON GL,
            (
                SELECT CodG
                FROM GYM
                WHERE City="Turin"
            ) G
        WHERE GL.CodG=G.CodG
        GROUP BY GL.SSN
        HAVING COUNT(DISTINCT GL.CodG)>=3
    )
```

/\*1.b

For each gym in which more than 10 Karate group lessons (NameS = "Karate") have been conducted, show the code of the gym and, separately for each trainer, the total number of participants to the group lessons (of any specialty) given by the trainer in that gym.  
\*/

```
SELECT GL1.CodG, SSN, SUM(ParticipantsNumber) AS TotalNumber
FROM GROUP_LESSON GL1,
    (
        SELECT CodG
        FROM GROUP_LESSON GL,
            (
```

```

                SELECT CodS
                FROM SPECIALTY
                WHERE NameS="Karate"
            ) S
        WHERE GL.CodS=S.CodS
        GROUP BY CodG
        HAVING COUNT(*)>10
    ) G
WHERE GL1.CodG=G.CodG
GROUP BY GL1.CodG, SSN

```

/\*1.c

For each personal trainer who gave group lessons at every gym in his city, show name, surname and the number of specialties for which he gave lessons.  
\*/

```

SELECT Name, Surname, COUNT(DISTINCT CodS) AS NumberSpecialties
FROM TRAINER T, GROUP_LESSON GL
WHERE T.SSN=GL.SSN
    AND T.SSN IN
    (
        SELECT T1.SSN
        FROM TRAINER T1, GROUP_LESSON GL1, GYM G1
        WHERE T1.SSN=GL1.SSN
            AND GL1.CodG=G1.CodG
            AND G1.City=T1.City
        GROUP BY T1.SSN, T1.City
        HAVING COUNT(DISTINCT GL1.CodG)=
            (
                SELECT COUNT(*)
                FROM GYM
                WHERE GYM.City=T1.City
            )
    )
GROUP BY T.SSN, Name, Surname

```

/\*2.a

For each user type, show the average evaluation given to movies produced by

"Marvel" (MovieStudio = "Marvel").

\*/

```
SELECT UserType, AVG(Evaluation)
FROM USER U,
    (
        SELECT SSN, Evaluation
        FROM EVALUATION
        WHERE CodM IN
            (
                SELECT CodM
                FROM MOVIE
                WHERE MovieStudio = "Marvel"
            )
    ) EV
WHERE U.SSN=EV.SSN
GROUP BY UserType
```

/\*2.b

For each user belonging to type "Expert" who has never evaluated movies of

genre "Horror" but has evaluated at least 3 movies of genre "Comedy", show name, surname and the highest evaluation assigned to movies in language "Italian".

\*/

```
SELECT NameU, SurnameU, MaxEv
FROM USER U,
    (
        SELECT SSN, MAX(Evaluation) AS MaxEv
        FROM EVALUATION E2, MOVIE M2
```

```

WHERE E2.CodM=M2.CodM AND Language="Italian"
GROUP BY SSN
) R
WHERE UserType="Expert"
AND U.SSN NOT IN
(
SELECT SSN
FROM EVALUATION E, MOVIE M
WHERE M.CodM=E.CodM AND M.Genre="Horror"
)
AND U.SSN IN
(
SELECT SSN
FROM EVALUATION E1, MOVIE M1
WHERE M1.CodM=E1.CodM AND M1.Genre="Comedy"
GROUP BY SSN
HAVING COUNT(DISTINCT CodM)>=3
)
AND U.SSN=R.SSN

```