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2

3 Homework 2

4

5

6 EX 1

7

8 a)

9

```
10 SELECT Name, Surname, Datetour, count(GTCO.tourtypecode), sum(Duration)
11 FROM type_of_tour tot, GUIDED_TOUR_CARRIED_OUT GTCO, tour_guide tg
12 WHERE GTCO.TourTypeCode=tot.tourtypecode
13 AND GTCO.guidocode=tg.guidocode
14 AND GTCO.guidocode NOT IN ( SELECT guidocode
15 FROM GUIDED_TOUR_CARRIED_OUT GTCO2, groupp g
16 WHERE GTCO2.groupcode=g.groupcode
17 AND lang='fr')
18 Group by Name, Surname, Datetour;
```

19

20

21

22 b)

```
23 SELECT Monument, sum(NumberOParticipants)
24 FROM type_of_tour tot, GUIDED_TOUR_CARRIED_OUT gtco, groupp g
25 WHERE gtco.groupcode=g.groupcode
26 AND gtco.tourtypecode=tot.tourtypecode
27 AND Monument IN ( SELECT DISTINCT Monument
28 FROM GUIDED_TOUR_CARRIED_OUT gtco2, type_of_tour tot2
29 WHERE gtco2.tourtypecode=tot2.tourtypecode
30 GROUP BY Monument
31 HAVING count(gtco2.tourtypecode)>=10)
32 GROUP BY Monument
33 ORDER BY sum(NumberOParticipants) DESC;
```

34

35

36

37

38 EX 2

```
39 /*For the role of the primary keys in experiment,
40 I assumed each student could only do one experiment per day
41 with the same device in the same laboratory, hence i used
42 'date' to count*/
```

43

44 a)

45

```
46 SELECT DeviceName, LabName, Name, count(Date)
47 FROM Device d, Laboratory l, Experiment e
48 WHERE l.LabId=d.LabId
49 AND d.DeviceId=e.DeviceId
50 AND s.StudentId=e.StudentId
51 AND d.DeviceId in (SELECT DeviceId
52 FROM Experiment
53 Group by DeviceId
54 Having count(*)>=10)
55 Group by DeviceName, LabName, Name
```

56

57

58

59 b)

60

```
61 SELECT LAbID, LabName, Date
62 FROM Device d, Laboratory l, Experiment e
63 WHERE l.LabId=d.LabId
64 AND d.DeviceId=e.DeviceId
65 AND d.LabId in( SELECT LabId
66 FROM Student s2, Device d2, Experiment e2
67 WHERE d.DeviceId=e.DeviceId
68 AND s.StudentId=e.StudentId
69 AND DegreeCourse='Computer Engineering')
70 AND Category='Electronics'
71 AND MONTH(Date)=6
72 AND YEAR(Date)=2019;
```

73

```
74  
75  
76  
77 EX 3  
78  
79 a)  
80  
81 SELECT CampName, City, s.ActivityCode, count(SSN)  
82 FROM Summer_Camp sc, Activity A1, SUBSCRIPTION_TO_ACTIVITY_IN_SUMMER_CAMP s  
83 WHERE sc.campcode=s.campcode  
84 AND A1.activitycode=s.activitycode  
85 AND s.campcode in (select CampCode  
86 FROM SUBSCRIPTION_TO_ACTIVITY_IN_SUMMER_CAMP s2 , Activity a  
87 WHERE s2.activitycode=a.activitycode  
88 group by CampCode  
89 having count( distinct SSN)>=15 and count( distinct  
category)>=3)  
90 Group by CampName, City, s.ActivityCode;  
91  
92  
93  
94  
95 b)  
96  
97 SELECT t.Name, t.Surname, t.Birthdate, s.campcode, sc.CampName  
98 FROM Teenager t, SUBSCRIPTION_TO_ACTIVITY_IN_SUMMER_CAMP s, Summer_camp  
sc  
99 WHERE t.SSN=s.SSN  
100 AND s.CampCode=sc.CampCode  
101 AND s.SSN in (SELECT SSN  
102 FROM SUBSCRIPTION_TO_ACTIVITY_IN_SUMMER_CAMP s2  
103 GROUP BY s2.SSN  
104 HAVING count(distinct s2.Campcode)>5)  
105 AND t.Birthdate<'01-GEN-2005'  
106 Group by t.Name, t.Surname, t.Birthdate, s.campcode, sc.CampName  
107 Having count(distinct s.ActivityCode)=(Select count(distinct s3.Activitycode )  
108 FROM  
SUBSCRIPTION_TO_ACTIVITY_IN_SUMMER_CAMP s3  
Where s3.Campcode=s.CampCode);
```