Suppose that we need to keep data about the publications of academicians from different Universities. We construct a database including three tables:

**UnIversıty**

|  |  |  |
| --- | --- | --- |
| **u\_id** | **name** | **city** |
| 101 | Atilim | Ankara |
| 102 | Baskent | Ankara |
| 103 | Ondokuz Mayıs | Samsun |
| 104 | Metu | Ankara |
| 105 | Marmara | İstanbul |

**AcademIcIan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SSN** | **name** | **surname** | **spec\_area** | **uni\_id** |
| 1010 | Damla | Topallı | database | 103 |
| 2020 | Tuğba | Altındağ | network | 101 |
| 3030 | Hazan | Dağlayan | database | 101 |
| 4040 | Nergiz | Cagıltay | database | 104 |
| 5050 | Furkan | Kurtaran | security | 105 |
| 6060 | Seda | Çamalan | network | 104 |

**PublIcatIon**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **pb\_id** | **Name** | **year** | **citation** | **type** | **aSSN** |
| 1111 | Algorithms | 1994 | 15 | Book | 1010 |
| 2222 | Assesment DB Systems | 2010 | 20 | Journal | 2020 |
| 3333 | Content Management Problem | 2008 | 10 | Book | 4040 |
| 4444 | Learning Styles of Students | 2010 | 40 | Proceeding | 3030 |
| 5555 | Microwave Engineering Course | 2012 | 35 | Book | 6060 |
| 6666 | Mobile Computing | 2010 | 20 | Journal | 1010 |
| 7777 | Virtual environments | 1997 | 10 | Journal | 4040 |
| 8888 | A Remote Laboratory | 2005 | 25 | Proceeding | 2020 |
| 9999 | Intro. To DB | 2004 | 35 | Book | 4040 |

**Uni\_id** in Academicians table is the foreign key references **u\_id** in University table.

**aSSN** in Publication table is the foreign key references **SSN** in Academician table.

**Q1)** Displaythe names and surnames of academicians and the name of their universities who are working in the field of database.

**select a.name,a.surname,u.name**

**from academician a, university u**

**where a.uni\_id = u.u\_id and lower(spec\_area)='database'**

**Q2)** Update the citation for the publication named “Mobile Computing” to 23.

**update Publication**

**set citation=23**

**where name='Mobile Computing'**

|  |  |
| --- | --- |
| TYPE | NUMBER OF PUBLICATIONS |
| Book | 4 |
| Journal | 3 |

**Q3)** Write a query to show how many publications are there **according to each type**. Show the results if there are more than 2 publications for that type. Order the results in decreasing order of publication number.

**Hint:** Your output will be like that (considering the records in the table now)

**select type, COUNT (\*) as "Number of Publications"**

**from Publication**

**group by type**

**having COUNT (\*)>2**

**order by COUNT (\*) desc**

**Q4) a.** Display the publish year, citation and name of publication, with the surname and specialization area of academicians, who are working in the same field (spec area) with Seda. Show the results only if the citation value of the publications are higher than the average citation. **(You should use subquery for this question)**

**select p.year,p.citation,p.name,a.surname,a.spec\_area**

**from publication p, academician a**

**where p.aSSN=a.SSN and spec\_area=(select spec\_area from academicians where name='Seda') and citation > (select AVG(citation) from Publication)**

1. Modify the previous query. Show the results if citation value is greater than **ALL** the citations for the Book publications.

**select p.year,p.citation,p.name,a.surname,a.spec\_area**

**from publication p, academician a**

**where p.aSSN=a.SSN and spec\_area=(select spec\_area from academicians where name='Seda') and citation > ALL (select citation from Publication where type= ‘Book’)**