


```
Select publication.Id, publication.Title
From publication INNER Join coauthors Join researcher
On publication.Id=coauthors.PublicationID
And coauthors.AuthorID=researcher.Id
Where FirstName = 'Renata' and LastName = 'Borovica-Gajic' AND EndPage - StartPage
>=10;
-- END Q3
--
```

```
-- BEGIN Q4
SELECT Id, Title, Count(*) as Citations
FROM publication JOIN referencing
ON publication.Id=referencing.referencedPublicationId
GROUP BY Id
HAVING Citations=(
SELECT Count(*) as Citations
FROM publication JOIN referencing
ON publication.Id=referencing.referencedPublicationId
GROUP BY Id
ORDER BY Citations desc
LIMIT 1);
-- END Q4
--
```

```
-- BEGIN Q5
SELECT publication.Id, documentURL
FROM publication JOIN referencing
ON publication.Id=referencing.referencedPublicationId
JOIN publication_has_keyword
ON publication.Id=publication_has_keyword.publicationID
JOIN keyword ON keyword.Id=publication_has_keyword.keywordID
WHERE word='Databases'
GROUP BY publication.Id
HAVING COUNT(*) >= 1;
-- END Q5
--
```

```
-- BEGIN Q6
SELECT Firstname, Lastname
FROM researcher INNER JOIN coauthors ON researcher.Id=coauthors.AuthorID
INNER JOIN topten ON coauthors.PublicationID=topten.PublicationId
INNER JOIN publication ON coauthors.PublicationID=publication.Id
INNER JOIN referencing ON publication.Id=referencing.referencedPublicationId
GROUP BY researcher.Id
HAVING COUNT(*) >=2
ORDER BY firstname, lastname;
-- END Q6
--
```

```
-- BEGIN Q7
SELECT Id, word
```

```

FROM topten
INNER JOIN publication_has_keyword ON topten.PublicationId =
publication_has_keyword.PublicationId
INNER JOIN keyword ON publication_has_keyword.KeywordId = keyword.ID
GROUP BY keyword.Id
HAVING COUNT(DISTINCT topten.publicationID) = (
    SELECT COUNT(DISTINCT topten.publicationID)
    FROM topten
    INNER JOIN publication_has_keyword ON topten.PublicationId =
publication_has_keyword.PublicationId
    INNER JOIN keyword ON publication_has_keyword.KeywordId = keyword.ID
    GROUP BY keyword.Id
    ORDER BY COUNT(DISTINCT topten.publicationID) DESC
    LIMIT 1);
-- END Q7
--

```

```

-- BEGIN Q8
SELECT firstname, lastname, COUNT(*)as totalCitationCount
FROM researcher INNER JOIN coauthors ON researcher.Id=coauthors.AuthorID
INNER JOIN publication ON coauthors.PublicationID=publication.Id
INNER JOIN referencing ON publication.Id=referencing.referencedPublicationId
GROUP BY researcher.Id
HAVING totalCitationCount = (
    SELECT COUNT(*) AS maxCitationCount
    FROM researcher
    INNER JOIN coauthors ON researcher.Id = coauthors.AuthorID
    INNER JOIN publication ON coauthors.PublicationID = publication.Id
    INNER JOIN referencing ON publication.Id = referencing.referencedPublicationId
    GROUP BY researcher.Id
    ORDER BY COUNT(*) DESC
    LIMIT 1);
-- END Q8
--

```

```

-- BEGIN Q9
SELECT DISTINCT r1.FirstName, r1.LastName
FROM Researcher AS r1
INNER JOIN Coauthors AS c1 ON r1.Id = c1.AuthorId
INNER JOIN Publication AS p1 ON c1.PublicationId = p1.Id
INNER JOIN Coauthors AS c2 ON p1.Id = c2.PublicationId
INNER JOIN Researcher AS r2 ON c2.AuthorId = r2.Id
INNER JOIN Researcher_has_Keyword AS rk1 ON r1.Id = rk1.ResearcherId
INNER JOIN Keyword AS k1 ON rk1.KeywordId = k1.Id
INNER JOIN Researcher_has_Keyword AS rk2 ON r2.Id = rk2.ResearcherId
INNER JOIN Keyword AS k2 ON rk2.KeywordId = k2.Id
WHERE k1.Word = 'Databases' AND k2.Word = 'Machine learning'
AND r1.Id <> r2.Id;
-- END Q9
--

```

```

-- BEGIN Q10
SELECT DISTINCT r.firstname, r.lastname

```

```
FROM researcher AS r
INNER JOIN coauthors AS c1 ON r.id = c1.authorid
INNER JOIN publication AS p1 ON c1.publicationid = p1.id
INNER JOIN coauthors AS c2 ON p1.id = c2.publicationid
INNER JOIN researcher AS r2 ON c2.authorid = r2.id
WHERE r2.firstname = 'Renata' AND r2.lastname = 'Borovica-Gajic'
AND p1.DateOfPublication < '2023-01-01'
AND NOT EXISTS (
  SELECT *
  FROM coauthors AS c3
  INNER JOIN publication AS p2 ON c3.PublicationId = p2.Id
  WHERE c3.AuthorId = r.Id
  AND p2.DateOfPublication >= '2023-01-01'
  AND p2.Id = p1.Id)
AND NOT (r.firstname = 'Renata' AND r.lastname = 'Borovica-Gajic');
-- END Q10
--
```

```
-- END OF ASSIGNMENT Do not write below this line
```