Tables:

Article (key, title, year, month, )

Book ()

Data ()

Incollection ()

Inproceedings ()

Mastersthesis ()

Phdthesis ()

Proceedings ()

www ()

author ()

Article\_author (key, author\_name)

…

Queries:

Q1

For each type of publication: year

CREATE TABLE Result1 (

publication\_type VARCHAR(50) PRIMARY KEY,

count INT

);

SET @article\_count :=

(SELECT COUNT(\*) FROM Articles WHERE year BETWEEN 2010 AND 2019);

INSERT INTO Result1 (publication\_type, count)

VALUES (“Article”, @article\_count);

Q2

Conferences: num of papers (proceedings & inproceedings) in each year

SELECT booktitle

FROM (SELECT \* FROM Proceedings UNION SELECT \* FROM Inproceedings)

WHERE key LIKE ‘conf/%’

GROUP BY booktitle, year

HAVING COUNT(\*)>500;

Q3

For each 10-year period, count num of conference publications

SET @conf\_pub\_count\_1970 := (

SELECT SUM(count),

FROM

(SELECT year, COUNT(\*)

FROM (SELECT \* FROM Proceedings UNION SELECT \* FROM Inproceedings)

WHERE year BETWEEN 1970 AND 2019 AND key LIKE ‘conf/%’

GROUP BY year)

WHERE year BETWEEN 1970 AND 1979

);

Q4

Author name, conference or journal name (from articles, proceedings & inproceedings), number of collaborators

## Find all authors

SELECT DISTINCT author

FROM Article\_author, Article

WHERE journal LIKE ’% data’ OR journal LIKE ’data %’ OR journal LIKE ’% data %’

OR journal LIKE ’% Data’ OR journal LIKE ’Data %’ OR journal LIKE ’% Data %’

OR journal LIKE ’% DATA’ OR journal LIKE ’DATA %’ OR journal LIKE ’% DATA %’

## Find num of collaborators

SELECT author, COUNT(collabrator)

FROM (

(SELECT DISTINCT author, collabrator

FROM Article\_author, Article\_author

WHERE author <> author)

UNION () UNION ()

)

GROUP BY author

## ORDER BY and find all the top authors

WITH TempV AS

(SELECT author, RANK() OVER (ORDER BY collab\_count DESC) AS R

FROM Product)

SELECT \*

FROM TempV

WHERE R = 1

Q5

top 10 authors, conference or journal, publication titile

ORDER BY pub\_count DESC

LIMIT 10;

Q6

Conference name, month, count number of proceedings

Q7

1. Author, paper, year, family name
2. Publication time, author, count number of publications

Q8