

```
create table journal
(
name varchar(30) primary key not null,
frequency varchar(30)
);
```

```
create table volume
(
id integer primary key not null,
name varchar(30) primary key not null,
dates date,
publicationDate date,
foreign key name references journal(name)
);
```

```
create table volumeTheme
(
id integer primary key not null,
name varchar(30) primary key not null ,
keywld integer primary key not null,
foreign key id references volume(id),
foreign key name references volume(name),
foreign key keywld references keywords(keywld)
);
```

```
create table person
(
email varchar(30) primary key not null,
name varchar(30) not null,
vid integer primary key not null,
vname varchar(30) primary key not null,
isAuthor boolean,
isReviewer boolean,
isEditor boolean,
foreign key vid references volume(id),
foreign key vname references volume(name)
);
```

```
create table PersonInterest
(
email varchar(30) primary key not null,
keywld integer primary key not null,
foreign key email references person(email),
foreign key keywld references keywords(keywld)
```

);

```
create table keywords
(
  keywld integer primary key not null,
  keyword varchar(30) not null
);
```

```
create table writtenBy
(
  id integer primary key not null,
  email varchar(30) primary key,
  foreign key id references Article(id),
  foreign key email references person(email)
);
```

```
create table Article
(
  id integer primary key not null,
  title varchar(30),
  bodyText varchar(60),
  volId integer,
  volName varchar(30),
  correspAut varchar(30),
  submissionDate date,
  result varchar(100),
  foreign key volId references volume(id),
  foreign key volName references volume(name),
  foreign key correspAut references person(email),
  foreign key id references ArticleReviewer(id)
);
```

```
create table ArticleKeywords
(
  aid integer primary key not null,
  keywld integer primary key not null,
  foreign key aid references Article(id)
);
```

```
create table ArticleReviewer
(
  id integer primary key not null,
  email varchar(30) primary key,
  score1 integer,
```

```
score2 integer,  
score3 integer,  
foreign key email references person(email)  
);
```

```
INSERT INTO `journal`(`name`, `frequency`) VALUES ('Journal of Chemistry',  
'Biannual'),  
( 'Journal of Psychology', 'Monthly'),  
( 'Journal of Economics', 'Quarterly'),  
( 'Journal of Literature', 'Biweekly'),  
( 'Journal of History', 'Annually');
```

```
INSERT INTO `volume`(`vid`, `name`, `dates`, `publicationDate`) VALUES  
(11, 'Journal of Chemistry', '2024-05-01', '2024-05-15'),  
(12, 'Journal of Chemistry', '2024-06-01', '2024-06-15'),  
(21, 'Journal of Psychology', '2024-06-01', '2024-06-15'),  
(22, 'Journal of Psychology', '2024-07-01', '2024-07-15'),  
(23, 'Journal of Psychology', '2024-08-01', '2024-08-15'),  
(31, 'Journal of Economics', '2024-07-01', '2024-07-15'),  
(32, 'Journal of Economics', '2024-08-01', '2024-08-15'),  
(41, 'Journal of Literature', '2024-07-01', '2024-07-15'),  
(51, 'Journal of History', '2024-09-01', '2024-09-15');
```

```
INSERT INTO `volumeTheme`(`id`, `name`, `keywld`) VALUES  
(11, 'Journal of Chemistry', 1),  
(12, 'Journal of Chemistry', 2),  
(21, 'Journal of Psychology', 3),  
(22, 'Journal of Psychology', 4),  
(23, 'Journal of Psychology', 5);  
(31, 'Journal of Economics', 6),  
(32, 'Journal of Economics', 7),  
(41, 'Journal of Literature', 8),  
(51, 'Journal of History', 9);
```

```
INSERT INTO `person`(`email`, `name`, `vid`, `vname`, `isAuthor`, `isReviewer`,  
`isEditor`) VALUES ('carol@gmail.com', 'Carol Davis', 11, 'Journal of  
Chemistry', true, false, true),  
( 'davis@gmail.com', 'Davis Martin', 12, 'Journal of Chemistry', true, true,  
false),  
( 'david@gmail.com', 'David Gilmour', 21, 'Journal of Psychology', true, false,  
true),  
( 'ted@gmail.com', 'Ted Gilly', 22, 'Journal of Psychology', true, false, true),  
( 'danny@gmail.com', 'Danny Fisherman', 31, 'Journal of Economics', true,
```

```
false, true),
('emma@gmail.com', 'Emma Brown', 32, 'Journal of Economics', true, false,
false),
('nick@gmail.com', 'Nick Miller', 41, 'Journal of Literature', true, true, false),
('grace@gmail.com', 'Grace Martinez', 51, 'Journal of History', true, false,
true);
('tom@gmail.com', 'Tom Jerry', 41, 'Journal of Literature', false, true, false),
('sofya@gmail.com', 'Sofya Nomore', 51, 'Journal of History', false, false,
true);
```

```
INSERT INTO `ArticleReviewer`(`id`, `email`, `score1`, `score2`, `score3`)
VALUES
(1, 'carol@gmail.com', 0, 1, 1),
(2, 'danny@gmail.com', 1, 0.5, 1),
(3, 'david@gmail.com', 1, 1, 0.5),
(4, 'davis@gmail.com', 0.5, 1, 0.5),
(5, 'emma@gmail.com', 0.5, 1, 0.5),
(8, 'tom@gmail.com', 0.5, 1, 1),
(9, 'sofya@gmail.com', 0.5, 1, 0.5),
(10, 'ted@gmail.com', 0, 1, 1);
```

```
INSERT INTO `Article`(`id`, `title`, `bodyText`, `volId`, `volName`, `correspAut`,
`submissionDate`, `result`) VALUES
(4, 'Chemical Kinetics', 'How can we mix...', 11, 'Journal of Chemistry',
'carol@gmail.com', '2024-05-10', 'Accepted'),
(1, 'What is Organic Chemistry', 'Organic...', 12, 'Journal of Chemistry',
'davis@gmail.com', '2024-05-10', 'Under Review'),
(10, 'Understanding Human Behavior ', 'Did you ever wonder...', 21, 'Journal
of Psychology', 'david@gmail.com', '2024-06-10', 'Accepted'),
(3, 'How we know?', 'Did you ever wonder...', 23, 'Journal of Psychology',
'ted@gmail.com', '2024-06-10', 'Accepted'),
(2, 'What is Microeconomics?', 'Microeconomics mean...', 31, 'Journal of
Economics', 'emma@gmail.com', '2024-07-10', 'Under Review'),
(5, 'Impact of Inflation', 'Lorem ipsum...', 31, 'Journal of Economics',
'danny@gmail.com', '2024-07-10', 'Under Review'),
(8, 'Shakespearean Sonnets', 'Shakespearean...', 41, 'Journal of Literature',
'nick@gmail.com', '2024-08-10', 'Accepted'),
(9, 'Ancient Egyptians', 'Lorem ipsum...', 51, 'Journal of History',
'grace@gmail.com', '2024-09-10', 'Under Review');
```

```
INSERT INTO `keywords`(`keywld`, `keyword`) VALUES
(1, 'Chemical Reactions'),
(2, 'Organic Chemistry'),
(3, 'Behavioral Psychology'),
```

(4, 'History of Psychology'),
(5, 'Psychology News'),
(6, 'Microeconomics'),
(7, 'International Economics'),
(8, 'Classic Literature'),
(9, 'Ancient Civilizations');

INSERT INTO `volumeTheme`(`id`, `name`, `keywld`) VALUES
(11, 'Journal of Chemistry,1),
(12, 'Journal of Chemistry, 2),
(21, 'Journal of Psychology', 3),
(21, 'Journal of Psychology, 4),
(31, 'Journal of Economics', 6),
(32, 'Journal of Economics', 7),
(41, 'Journal of Literature', 8),
(51, 'Journal of History', 9);

INSERT INTO `writtenBy`(`id`, `email`) VALUES
(4,'carol@gmail.com'),
(1,'davis@gmail.com'),
(10,'david@gmail.com'),
(3,'ted@gmail.com'),
(2,'emma@gmail.com'),
(5,'danny@gmail.com'),
(8,'nick@gmail.com'),
(9,'grace@gmail.com');

INSERT INTO `ArticleKeywords`(`aid`, `keywld`) VALUES
(4,'1'),
(1,'2'),
(10,'3'),
(3,'4'),
(2,'6'),
(5,'7'),
(8,'8'),
(9,'9');

INSERT INTO `PersonInterest`(`email`, `keywld`) VALUES
(carol@gmail.com', '1'),
(carol@gmail.com', '2'),
(davis@gmail.com', '2'),
(davis@gmail.com', '1'),
(david@gmail.com', '3'),

```
('david@gmail.com','4'),  
('ted@gmail.com','3'),  
('ted@gmail.com','4'),  
('emma@gmail.com','6'),  
('emma@gmail.com','7'),  
('danny@gmail.com','7'),  
('danny@gmail.com','6'),  
('nick@gmail.com','8'),  
('grace@gmail.com','9'),  
('tom@gmail.com','8'),  
('sofya@gmail.com','9');
```

```
1)  
SELECT *  
FROM Article A, Volume V  
WHERE A.volID = V.vid and V.vid=11 ;
```

```
2)  
SELECT Person.*  
FROM Person, Volume  
WHERE Volume.vid = 11  
      AND isAuthor = 'FALSE' AND isReviewer = 'FALSE' AND isEditor =  
      'FALSE';
```

```
3)  
SELECT email, name  
FROM person  
WHERE isReviewer = true  
AND email NOT IN (  
    SELECT email  
    FROM ArticleReviewer  
    WHERE id = 4);
```

```
4)  
SELECT R.email, R.score1,R.score2,R.score3  
FROM ArticleReviewer R  
WHERE R.id= 2
```

```
5)  
SELECT Person.id, Person.name, Article.id, ArticleReviewer.score1,  
ArticleReviewer.score2, ArticleReviewer.score3, Article.result  
FROM ArticleReviewer, Article, Person  
JOIN Article ON ArticleReviewer.id = Article.id  
JOIN Person ON ArticleReviewer.email = Person.email
```

```
WHERE Article.id = 4,  
      EXISTS(  
          SELECT COUNT(*)  
            FROM Article  
           WHERE Article.id = 4, Article.result = 'Accepted'  
      );
```

```
6)  
SELECT A.title, A.correspAut  
FROM Article A  
WHERE A.volId=11 and A.result='Accepted'
```

```
7)  
SELECT A.title, R.email, A.correspAut  
FROM Article A, ArticleReviewer R  
WHERE A.volId=11
```

```
8)  
SELECT Person.*  
COUNT(ArticleReviewer.id) AS numOfReviewers  
FROM Person, ArticleReviewer  
JOIN ArticleReviewer ON Person.email = ArticleReviewer.email  
WHERE Person.isReviewer = 'TRUE'  
GROUP BY Person.id, Person.email, Person.name  
HAVING  
    COUNT(ArticleReviewer.id) = (  
        SELECT  
            MIN(COUNT(ArticleReviewer.id)) AS MinNumberOfReview  
        FROM Person, ArticleReviewer  
        JOIN ArticleReviewer ON Person.email = ArticleReviewer.email  
        WHERE Person.isReviewer = 'true'  
        GROUP BY Person.email
```

```
9  
SELECT A.correspAut  
COUNT(*) AS numOfAccepted  
FROM Article A  
WHERE A.result = 'Accepted'  
GROUP BY A.correspAut ORDER BY numOfAccepted DESC;
```

```
10  
SELECT A.title, A.result  
FROM Article A  
JOIN Person ON A.correspAut = Person.email  
WHERE Person.name = 'Carol Davis'
```