

```
CREATE SCHEMA `exercise3` ;
```

```
CREATE TABLE users  
( id int AUTO_INCREMENT,  
  name varchar(255),  
  type ENUM('admin', 'normal'),  
  PRIMARY KEY(id)  
);
```

```
INSERT INTO users(name, type) VALUES('Nishant', 'admin');  
INSERT INTO users(name, type) VALUES('Navin', 'normal');  
INSERT INTO users(name, type) VALUES('Deepak', 'normal');  
INSERT INTO users(name, type) VALUES('Bhavik', 'admin');
```

```
CREATE TABLE categories  
( id int AUTO_INCREMENT,  
  name varchar(255),  
  PRIMARY KEY(id)  
);
```

```
INSERT INTO categories(name) VALUES('Travel');  
INSERT INTO categories(name) VALUES('Adventur');  
INSERT INTO categories(name) VALUES('History');  
INSERT INTO categories(name) VALUES('Space');
```

```
CREATE TABLE articles  
( id int AUTO_INCREMENT,  
  user_id int,  
  category_id int,  
  title varchar(255),  
  PRIMARY KEY(id ,title),  
  FOREIGN KEY(user_id) REFERENCES users(id),  
  FOREIGN KEY(category_id) REFERENCES categories(id)  
);
```

```
INSERT INTO articles(user_id, category_id, title) VALUES(2, 4, 'Future in space');  
INSERT INTO articles(user_id, category_id, title) VALUES(1, 3, 'Historic Places');  
INSERT INTO articles(user_id, category_id, title) VALUES(4, 2, 'Wild Adventures');
```

```
INSERT INTO articles(user_id, category_id, title) VALUES(3, 4, 'New Technologies');
INSERT INTO articles(user_id, category_id, title) VALUES(3, 1, 'Travel places');
INSERT INTO articles(user_id, category_id, title) VALUES(1, 1, 'Travel Plans');
```

```
CREATE TABLE comments
( id int AUTO_INCREMENT,
  user_id int,
  article_id int,
  comment_text varchar(255),
  PRIMARY KEY(id),
  FOREIGN KEY(user_id) REFERENCES users(id),
  FOREIGN KEY(article_id) REFERENCES articles(id)
);
```

```
INSERT INTO comments(user_id, article_id, comment_text) VALUES(1, 1, 'Very Helpful');
INSERT INTO comments(user_id, article_id, comment_text) VALUES(3, 1, 'Nice');
INSERT INTO comments(user_id, article_id, comment_text) VALUES(2, 3, 'Accurate');
INSERT INTO comments(user_id, article_id, comment_text) VALUES(1, 4, 'Average');
INSERT INTO comments(user_id, article_id, comment_text) VALUES(4, 2, 'Very Great');
```

2 select all articles whose author's name is user3

```
SELECT users.name, articles.title AS article FROM articles
INNER JOIN users WHERE users.name IN(SELECT name FROM users WHERE id = 3)
AND articles.user_id = users.id;
```

Deepak	New Technologies
Deepak	Travel places

3 For all the articles being selected above, select all the articles and also the comments associated with those articles in a single query (Do this using subquery also)

```
SELECT articles.title AS article, comments.comment_text AS comment FROM comments
INNER JOIN articles WHERE articles.title
IN(SELECT title FROM articles WHERE user_id = 3)
AND comments.article_id = articles.id;
```

New Technologies	Average
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4 Write a query to select all articles which do not have any comments (Do using subquery also)

```
SELECT articles.title AS 'article with no comments' FROM articles  
LEFT JOIN comments ON articles.id = comments.article_id  
WHERE comments.article_id IS NULL;
```

Travel Plans

Travel places

5 Write a query to select article which has maximum comments

6 Write a query to select article which does not have more than one comment by the same user (do this using left join and group by)

```
SELECT articles.title AS 'article (having not more than one comment from same user)'  
FROM articles LEFT JOIN comments ON articles.id = comments.article_id  
GROUP BY articles.title HAVING COUNT(comments.user_id) = COUNT(DISTINCT  
comments.user_id);
```

Future in space

Historic Places

New Technologies

Travel places

Travel Plans

Wild Adventures