

## Seventh hands-on exercise (answers)

### - Task 1

#### Answer to Question 3:

```
Create table CFanalysis AS (SELECT DISTINCT username, hotel_id FROM
tripadvisor_review_sample_without_reviewtext WHERE username IS NOT NULL);

ALTER TABLE `CFanalysis` ADD INDEX `username` (`username`), ADD INDEX
`hotel_id` (`hotel_id`);
# what would happen, if we don't build index.

SELECT a.username as Person1, b.username as Person2, COUNT(*) as
Frequency
FROM CFanalysis as a JOIN CFanalysis as b
ON a.hotel_id = b.hotel_id AND a.username > b.username
GROUP BY a.username, b.username ORDER BY Frequency desc
```

**Answer to Question 4:** The above results based on association analysis can be applied to an online auction platform that sells used stuff. For instance, suppose that user A and user B are a pair who strong similar interests, if user A likes a product (e.g., making a bid for a product), user B is likely to like that product as well. Thus, when a new stuff appears on the site when a customer (A) makes a bid to a specific stuff, the stuff will be recommended to another customer (B), who has exhibited a strong similarity in the preference for products with the customer (A). Please note that A may share similar interests with several other customers, not just B. Also if B also bid for the product, there might be other customers similar to B (but not similar to A) can be recommended.

- Task 2: please see the course slides for the code
- Task 3: please see the course slides for the solution