

Task: 3

An MMORPG game is under development. For the profile and inventory mechanics, it needs a query that advises the best quality items available in the inventory.

Item quality is represented by three ranks (from lowest to highest): "common", "rare", and "epic".

The result should have the following columns: username / type / advised_quality / advised_name.

- username - account username
- type - item type
- advised_quality - advised item quality ("common", "rare" or "epic")
- advised_name - list of advised items records:
 - A record is the name of the item.
 - Records are separated by a comma.
 - Records are sorted in ascending order by name.

The result should be sorted in ascending order by username, then in ascending order by type.

Note:

- Accounts may not have items of a specific type at all.
- More than one item of the same type may be advised, as long as they are of the same quality.

Schema

accounts

| name | type | constraint | description |
|------|------|------------|-------------|
|------|------|------------|-------------|

| | | | |
|----------|--------------|-------------|------------------|
| id | INT | PRIMARY KEY | Account ID |
| username | VARCHAR(255) | | Account username |

items

| name | type | constraint | description |
|------|----------------------------------|-------------|-------------|
| id | INT | PRIMARY KEY | Item ID |
| type | ENUM('sword', 'shield', 'armor') | | Item type |
| name | VARCHAR(255) | | Item name |

accounts_items

| name | type | constraint | description |
|------------|--------------------------------|--|--------------|
| account_id | INT | FOREIGN KEY (account_id → accounts.id) | Account ID |
| item_id | INT | FOREIGN KEY (item_id → items.id) | Item ID |
| quality | ENUM('common', 'rare', 'epic') | | Item quality |

Sample Data for **accounts**

| id | username |
|----|----------|
| 1 | cmunns1 |
| 2 | yworcs0 |

Sample Data for **items**

| id | type | name |
|----|--------|---------------------|
| 1 | sword | Sword of Solanaceae |
| 2 | shield | Shield of Rosaceae |
| 3 | shield | Shield of Fagaceae |
| 5 | shield | Shield of Lauraceae |

| | | |
|----|--------|--------------------|
| 6 | sword | Sword of Loasaceae |
| 7 | armor | Armor of Myrtaceae |
| 8 | shield | Shield of Rosaceae |
| 10 | shield | Shield of Rosaceae |

Sample Data for `accounts_items`

| account_id | item_id | quality |
|------------|---------|---------|
| 1 | 10 | epic |
| 1 | 2 | rare |
| 1 | 2 | rare |
| 1 | 7 | rare |
| 1 | 1 | common |
| 1 | 2 | common |
| 1 | 3 | common |
| 1 | 5 | common |
| 1 | 8 | common |
| 2 | 8 | epic |
| 2 | 5 | rare |
| 2 | 3 | common |
| 2 | 6 | common |

Expected Output

| username | type | advised_quality | advised_name |
|----------|--------|-----------------|--|
| cmunns1 | shield | epic | Shield of Rosaceae |
| cmunns1 | sword | rare | Sword of Solanaceae |
| yworcs0 | armor | epic | Armor of Asteraceae |
| yworcs0 | shield | common | Shield of Fagaceae, Shield of Rosaceae |
| yworcs0 | sword | rare | Sword of Loasaceae |

