Submit

Description | Accepted × | Editorial | Solutions | Submissions

3368. First Letter Capitalization `Premium`   Solved ✓

`Hard`   `Topics`

SQL Schema >   Pandas Schema >
Table: `user_content`

```
+--------------+---------+
| Column Name  | Type    |
+--------------+---------+
| content_id   | int     |
| content_text | varchar |
+--------------+---------+
```

content_id is the unique key for this table.
Each row contains a unique ID and the corresponding text content.

Write a solution to transform the text in the `content_text` column by applying the following rules:

- Convert the first letter of each word to uppercase
- Keep all other letters in lowercase
- Preserve all existing spaces

Note: There will be no special character in `content_text`.

Return *the result table that includes both the original* `content_text` *and the modified text where each word starts with a capital letter.*

The result format is in the following example.

Example:

Input:

user_content table:

```
+------------+--------------------------------+
| content_id | content_text                   |
+------------+--------------------------------+
| 1          | hello world of SQL             |
| 2          | the QUICK brown fox            |
| 3          | data science AND machine learning |
| 4          | TOP rated programming BOOKS    |
+------------+--------------------------------+
```

Output:

```
+------------+--------------------------------+------------------+
| content_id | original_text                  | converted_text   |
+------------+--------------------------------+------------------+
| 1          | hello world of SQL             | Hello World Of   |
| 2          | the QUICK brown fox            | The Quick Brow   |
| 3          | data science AND machine learning | Data Science A |
| 4          | TOP rated programming BOOKS    | Top Rated Prog   |
+------------+--------------------------------+------------------+
```

Explanation:

- For content_id = 1:
  - Each word's first letter is capitalized: Hello World Of Sql

- For content_id = 2:
  - Original mixed-case text is transformed to title case: The Quick Brown Fox

- For content_id = 3:
  - The word AND is converted to "And": "Data Science And Machine Learning"

- For content_id = 4:
  - Handles word TOP rated correctly: Top Rated
  - Converts BOOKS from all caps to title case: Books

Seen this question in a real interview before?   1/5
Yes   No

Accepted **1,084**/1.3K | Acceptance Rate **86.3**%

🏷 Topics

💬 Discussion (1)

👍 4 👎 💬 1 ☆ 🔗 ?   ● 0 Online

Code

Pandas ∨   • Auto

```python
1  import pandas as pd
2
3  def process_text(user_content: pd.DataFrame) -> pd.DataFrame:
4
5      # change to title case with title() method
6      user_content['converted_text'] = (
7          user_content.content_text.apply(lambda x: x.title()))
8
9      # rename column per problem request
10     return user_content.rename(columns={'content_text': 'original_text'})
11
```

△ Saved   Ln 11, Col 5

Testcase > >_ Test Result

Accepted   Runtime: 204 ms

✓ Case 1

Input

```
user_content =
| content_id | content_text                     |
| ---------- | -------------------------------- |
| 1          | hello world of SQL               |
| 2          | the QUICK brown fox              |
| 3          | data science AND machine learning |
| 4          | TOP rated programming BOOKS      |
```