



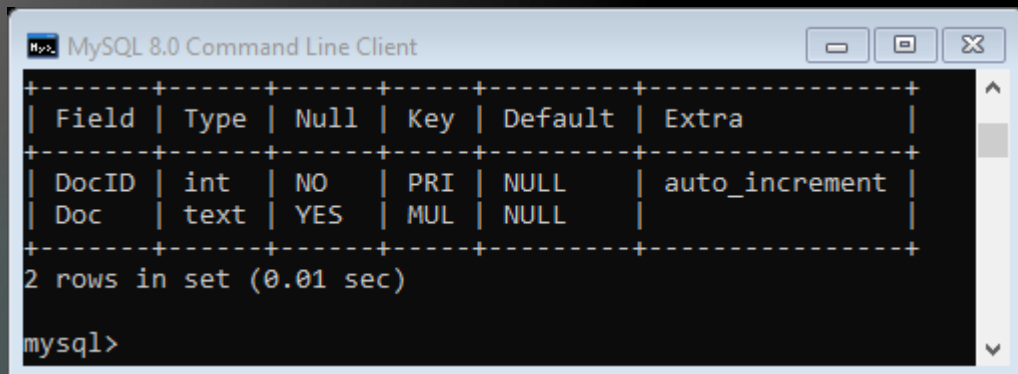
# Full Text Search Exercise

USING TEXT SEARCH SCORING IN MYSQL

# General

2

- Execute the script provided to build the **docText** database.
- The **docText** database consists of a single table **documents** containing a series of text documents about submarines in the US Navy.



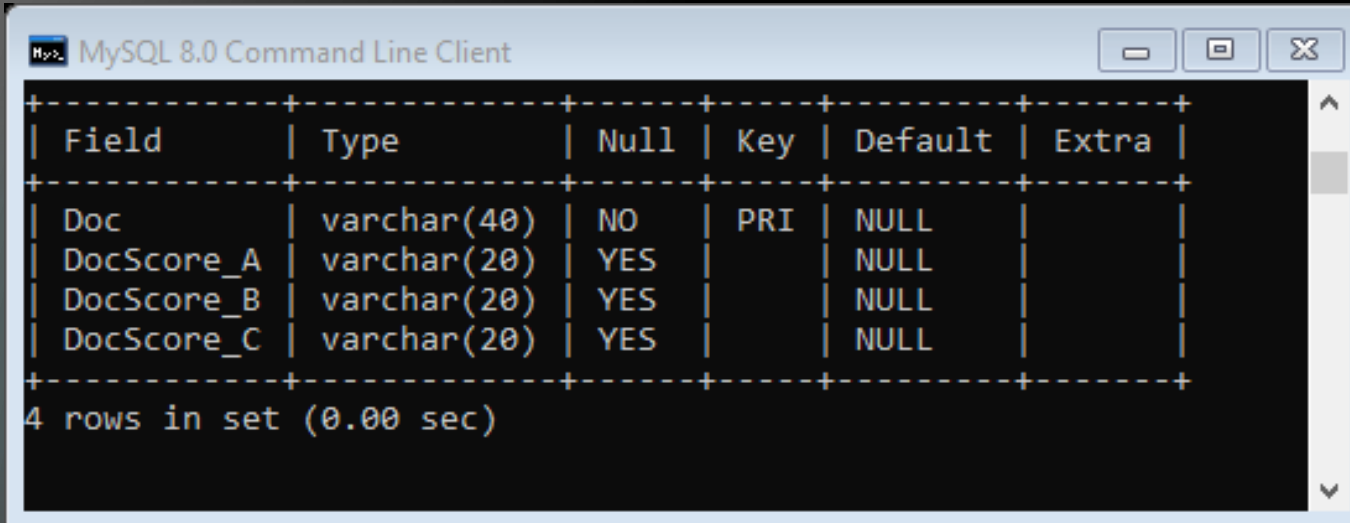
```
MySQL 8.0 Command Line Client
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| DocID | int  | NO   | PRI | NULL    | auto_increment |
| Doc   | text | YES  | MUL | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql>
```

# Task

3

1. Create a stored procedure named **wordCounter** which accepts three parameters and creates/displays the **docScoring** table. The DocID and the TD-IDF score for each specified parameter for each document in the **documents** table is contained in the **docScoring** table.



MySQL 8.0 Command Line Client

Field	Type	Null	Key	Default	Extra
Doc	varchar(40)	NO	PRI	NULL	
DocScore_A	varchar(20)	YES		NULL	
DocScore_B	varchar(20)	YES		NULL	
DocScore_C	varchar(20)	YES		NULL	

4 rows in set (0.00 sec)

- Your stored procedure **must utilize** one or more cursors for all data retrieval.
- You **may not** utilize any **SELECT INTO** statements.
- You **must utilize** a Full Text Search operation in this procedure.

Call the procedure with the parameters

1. 'submarine', 'Trident', 'Ohio'
2. 'submarines', 'sonar', 'Seawolf'
3. 'submarine', 'SSN', 'Virginia'

- **For a refresher on Full Text Search see your lecture slides and/or go here**  
<https://dev.mysql.com/doc/refman/8.0/en/full-text-natural-language.html>

# Expected Output

4

```
MySQL 8.0 Command Line Client

+-----+-----+-----+-----+
| Doc      | DocScore_A | DocScore_B | DocScore_C |
+-----+-----+-----+-----+
| D Search  | submarine  | Trident    | Ohio       |
| D->       | ----      | ----      | ----      |
| Document 1 | 0.01560969 | 0.72495246 | 2.17485738 |
| Document 2 | 0.01560969 | 0.00000000 | 0.00000000 |
| Document 3 | 0.03121938 | 0.00000000 | 0.00000000 |
| Document 4 | 0.00000000 | 0.00000000 | 0.00000000 |
+-----+-----+-----+-----+
6 rows in set (0.03 sec)

Query OK, 0 rows affected (0.03 sec)

+-----+-----+-----+-----+
| Doc      | DocScore_A | DocScore_B | DocScore_C |
+-----+-----+-----+-----+
| D Search  | submarines | sonar       | Seawolf     |
| D->       | ----      | ----      | ----      |
| Document 1 | 0.00000001 | 0.00000000 | 0.00000000 |
| Document 2 | 0.00000001 | 0.00000000 | 0.09061906 |
| Document 3 | 0.00000001 | 0.00000000 | 0.00000000 |
| Document 4 | 0.00000001 | 0.72495246 | 0.36247623 |
+-----+-----+-----+-----+
6 rows in set (0.02 sec)

Query OK, 0 rows affected (0.03 sec)

+-----+-----+-----+-----+
| Doc      | DocScore_A | DocScore_B | DocScore_C |
+-----+-----+-----+-----+
| D Search  | submarine  | SSN         | Virginia    |
| D->       | ----      | ----      | ----      |
| Document 1 | 0.01560969 | 0.00000000 | 0.00000000 |
| Document 2 | 0.01560969 | 0.54371434 | 0.00000000 |
| Document 3 | 0.03121938 | 0.09061906 | 1.44990492 |
| Document 4 | 0.00000000 | 0.00000000 | 0.00000000 |
+-----+-----+-----+-----+
```

- The `docScoring` table should display as shown for each procedure call.