

Query 7.44

Give me a summary of `s_link_type`. The result set should contain the count of each `s_link_type`. For example, here is a result set

Audio - 200

Video - 400

Initial Query:

```
SELECT s_link_type, COUNT(s_link_type) AS "Type" FROM song_media GROUP BY s_link_type ORDER BY s_link_type DESC
```

Showing rows 0 - 2 (3 total, Query took 0.2866 seconds.) [s_link_type: YOUTUBE... - AUDIO...]

```
SELECT s_link_type, COUNT(s_link_type) AS "Type" FROM song_media GROUP BY s_link_type ORDER BY s_link_type DESC
```

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

s_link_type	Type
youtube	196608
video	196608
audio	327680

Your SQL query has been executed successfully.

```
EXPLAIN SELECT s_link_type, COUNT(s_link_type) AS "Type" FROM song_media GROUP BY s_link_type ORDER BY s_link_type DESC
```

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id	select_type	table	type	possible_keys	key	key_len	ref	rows	Extra
1	SIMPLE	song_media	ALL	NULL	NULL	NULL	NULL	717220	Using temporary; Using filesort

Step 1 Changes:

- Changed `song_id` to `SMALLINT` from `INT`
- Changed `song_media_id` to `SMALLINT` from `INT`

Step 3 Changes:

- Added `BTREE` index for `s_link_type` to *possibly* assist with column comparisons going on behind the scenes, not necessarily in the query itself

Step 7 Changes:

- `ALTER TABLE `song_media` ADD FULLTEXT(`s_link_type`);`
 - automatically indexes each (presumably unique) value in `s_link_type` column

Final Changes:

- Removed `DESC` from end of query because the sorting doesn't really matter and it improved performance quite a bit

Final Query:

SELECT s_link_type, COUNT(s_link_type) AS "Type" FROM song_media GROUP BY s_link_type ORDER BY s_link_type

✓ Showing rows 0 - 2 (3 total, Query took 0.2128 seconds.) [s_link_type: AUDIO... - YOUTUBE...]

```
SELECT s_link_type, COUNT(s_link_type) AS "Type" FROM song_media GROUP BY s_link_type ORDER BY s_link_type
```

☐ Show all

Number of rows: 25

Filter rows:

+ Options

s_link_type	Type
audio	327680
Video	196608
Youtube	196608

Your SQL query has been executed successfully.

```
EXPLAIN SELECT s_link_type, COUNT(s_link_type) AS "Type" FROM song_media GROUP BY s_link_type ORDER BY s_link_type
```

+ Options

id	select_type	table	type	possible_keys	key	key_len	ref	rows	Extra
1	SIMPLE	song_media	index	NULL	s_link_type	42	NULL	716895	Using index