

# S03-L02 Practice

---

## Assignment

---

These queries run longer than 100ms. How would you make them run in less than 10ms?

Verify the execution plan.

```
SELECT `contract`.`archive_code`
FROM `contract`
WHERE 1=1
      AND `contract`.`archive_code` = 'DA970'
      AND `contract`.`deleted_flag` = 0
      AND `contract`.`sign_date` >= '1990-01-01'
;

SELECT `contract`.`archive_code`
FROM `contract`
WHERE 1=1
      AND `contract`.`archive_code` = 'DA970'
      AND `contract`.`deleted_flag` = 0
;
```

...

...

...

SPOILER: Below are the results

...

...

## Result

---

Add one index only. It should be used in both queries.

---

Practice advanced SQL with MySQL

```
ALTER TABLE contract ADD INDEX idx_archive_code_sign_date ( archive_code ,  
sign_date );
```

When running the following `EXPLAIN SELECT` you should see that the key used is `idx_archive_code_sign_date`.

```
EXPLAIN SELECT `contract`.`archive_code`  
FROM `contract`  
WHERE 1=1  
      AND `contract`.`archive_code` = 'DA970'  
      AND `contract`.`deleted_flag` = 0  
;
```