<epam>

Checks

Relational Databases Basics

TRAINING

CENTER

<epam>

Read and remember!

Check – a rule (limitation) every field value should comply with.

Several typical subject matter samples to use checks

A login must not be equal to a password.

An employment date must be at least 16 years later than a birth date.

A discount must not be greater than X% of an order total price.

A passport id/series must be in a specified format.

A maximum file storage period must not be greater than N days.

…

How to create a check

Let’s prohibit to add (or update) some application users in a way when their logins become equal to their passwords.

```
ALTER TABLE `user`
 ADD CONSTRAINT `CHK_login_password_mb_different`
  CHECK (SHA2(`u_login`, 256) != `u_password`)
```

The SQL query

Test result

```
Error Code: 3819.
Check constraint 'CHK_login_password_mb_different' is violated
```

We can not return a specific message on check violation, so make your check names meaningful!

How to create a check

Let’s prohibit to store files longer than 500 days.

```
ALTER TABLE `file`
 ADD CONSTRAINT `CHK_max_500_days_store`
  CHECK (DATEDIFF(FROM_UNIXTIME(`f_exp_dt`),
                  FROM_UNIXTIME(`f_upload_dt`)) <= 500)
```

The SQL query

Test result

```
Error Code: 3819.
Check constraint 'CHK_max_500_days_store' is violated
```

Once again: make your check names meaningful!

Live demo in Sparx Enterprise Architect and MySQL Workbench

<epam>

Checks

Relational Databases Basics

TRAINING

CENTER

<epam>