# DATABASE INTEGRITY

## Kombinasi store procedure dan trigger

Perhatikan 2 tabel :

```
CREATE TABLE student (regNo  char(8), name varchar(20), PRIMARY KEY (regNo));
CREATE TABLE log_student (event  varchar(15), time datetime);
```

Buat store procedure yang digunakan untuk mengisikan tabel student
Selanjutnya, buat trigger untuk menyimpan aktivitas insert pada tabel log secara otomatis.

**Store Procedure**

```
Delimiter //
Create procedure i_student (xregNo char(2),xname varchar(20))
Begin
    insert into student values (xregNo, xname);
    select * from student;
End
//
```

**Trigger**

```
Create trigger  i_log  after  insert  on student for each row
Begin
    insert into log_student  values ('add data', now());
 End
//
```

Execution :
Mysql>call i_student ('11','Joni')//
Mysql>call i_student ('22','Smith')//

student

| regNo | name |
|---|---|
| 11 | Joni |
| 22 | Smith |

log_student

| Event | Time |
|---|---|
| Add data | 2017-10-19 11:30:00 |
| Add data | 2017-10-19 11:31:10 |

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## Tugas

1. Buat trigger yang digunakan untuk menyimpan data di tabel log_student, jika operasi update atau delete di tabel student dilakukan:
   a. Jika operasi update dilakukan, maka atribut event pada tabel log_student diisi ‘update data’
   b. Jika operasi delete dilakukan, maka atribut event pada tabel log_student diisi ‘delete data’

log_student

| Event | Time |
|---|---|
| Add data | 2017-10-19 11:30:00 |
| Add data | 2017-10-19 11:31:10 |
| …. | |
| Update data | 2017-10-19 11:36:10 |
| Delete data | 2017-10-19 11:38:20 |

records are stored from trigger operations result