

1. VK отказались от хранения даты рождения. Хранят отдельно день, месяц, год – это дает возможность осуществлять индексированный поиск по полям без функций типа MONTH(дата). Изменена таблица :

```
CREATE TABLE profiles (  
  user_id INT UNSIGNED NOT NULL PRIMARY KEY,  
  sex CHAR(1) NOT NULL,  
  birthday date,  
  birthday_year int,  
  birthday_moth int,  
  birthday_day int,  
  hometown VARCHAR(100),  
  photo_id INT UNSIGNED NOT NULL  
);
```

```
CREATE TRIGGER insert_profile BEFORE INSERT ON profiles  
  FOR EACH ROW SET NEW.birthday_year = year(NEW.birthday), NEW.birthday_moth  
= month(NEW.birthday), NEW.birthday_day = day(NEW.birthday);
```

```
CREATE TRIGGER update_profile BEFORE UPDATE ON profiles  
  FOR EACH ROW SET NEW.birthday_year = year(NEW.birthday), NEW.birthday_moth  
= month(NEW.birthday), NEW.birthday_day = day(NEW.birthday);
```

2.

-- Таблица лайков

```
CREATE TABLE likes (  
  id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY,  
  item_id INT UNSIGNED NOT NULL,  
  media_type_id INT UNSIGNED NOT NULL,  
  owner_id INT UNSIGNED NOT NULL  
);
```

-- Таблица агрегатов лайков

```
CREATE TABLE agg (  
  likes_item_id INT UNSIGNED NOT NULL,  
  likes_count INT UNSIGNED NOT NULL  
);
```

--Здесь при добавлении всегда создаем нулевую запись что б в триггерах агрегирования не вычислять наличие записи в принципе

```
CREATE TRIGGER insert_media BEFORE INSERT ON media  
  FOR EACH ROW insert into agg (likes_item_id, likes_count) values (NEW.id, 0);
```

```
CREATE TRIGGER insert_likes BEFORE INSERT ON likes  
  FOR EACH ROW update agg set likes_count = likes_count + 1 where likes_item_id =  
NEW.item_id;
```

```
CREATE TRIGGER delete_likes BEFORE DELETE ON likes  
  FOR EACH ROW update agg set likes_count = likes_count - 1 where likes_item_id =  
OLD.item_id;
```

3.

Table	Rows	Actions		
agg	0	Generate		
communities	100	View Data	Empty Table	Export Table
communities_users	100	View Data	Empty Table	Export Table
friendship	100	View Data	Empty Table	Export Table
likes	100	View Data	Empty Table	Export Table
media	100	View Data	Empty Table	Export Table
media_types	100	View Data	Empty Table	Export Table
messages	100	View Data	Empty Table	Export Table
profiles	100	View Data	Empty Table	Export Table
users	100	View Data	Empty Table	Export Table