Учреждение образования
«БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ ИНФОРМАТИКИ И
РАДИОЭЛЕКТРОНИКИ»
Факультет компьютерных систем и сетей

Отчет по лабораторной работе №5

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Задание 1

```
set
    @min1:=(select min(id) from name1), @max1:=(select max(id) from name1),
    @min2:=(select min(id) from name2), @max2:=(select max(id) from name2),
    @min3:=(select min(id) from name3), @max3:=(select max(id) from name3),
    @minp:= 1, @maxp:= 1000000,
    @@cte_max_recursion_depth=1000000, FOREIGN_KEY_CHECKS=0;
insert student(id_name1, id_name2, id_name3, id_personal, edit_date)
select
    floor(@min1+RAND()*(@max1 - @min1 + 1)),
    floor(@min2+RAND()*(@max2 - @min2 + 1)),
    floor(@min3+RAND()*(@max3 - @min3 + 1)),
    row_number() over(),
    NOW()
from locality, region limit 1000000;
```

```
mysql> source subd/lab5/1.sql;
Query OK, 0 rows affected (0.01 sec)

Query OK, 1000000 rows affected (34.98 sec)
Records: 1000000 Duplicates: 0 Warnings: 0
```

Задание 2

```
CREATE TABLE temp (name char(40) not null);

LOAD DATA INFILE '/var/lib/mysql-files/street.sql' INTO TABLE  temp
FIELDS TERMINATED BY ',' ENCLOSED BY '\"'
LINES STARTING BY '(' TERMINATED BY ')' (name);

UPDATE temp SET name=REPLACE(name, ',', '');
```

INSERT street(name) select distinct substring_index(name, ' ', length(name) — length(replace(name, ' ', ''))) from temp;

INSERT street_type(name) select distinct substring_index(name, ' ', -1) from temp;

```
mysql> source subd/lab5/2.sql;
Query OK, 0 rows affected (0.08 sec)

Query OK, 0 rows affected (0.06 sec)

Query OK, 1079 rows affected (0.07 sec)
Records: 1079 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 304 rows affected (0.03 sec)
Rows matched: 1079 Changed: 304 Warnings: 0

Query OK, 1023 rows affected (0.07 sec)
Records: 1023 Duplicates: 0 Warnings: 0

Query OK, 10 rows affected (0.02 sec)
Records: 10 Duplicated: 0 Warnings: 0
```

Задание 3

LOAD DATA INFILE '/var/lib/mysql-files/district.sql' INTO TABLE district(name);
LOAD DATA INFILE '/var/lib/mysql-files/locality_type.sql' INTO TABLE
locality_type(name);
set
    @min1:=(select min(id) from country), @max1:=(select max(id) from country),
    @min2:=(select min(id) from region), @max2:=(select max(id) from region),
    @min3:=(select min(id) from district), @max3:=(select max(id) from district),
    @min4:=(select min(id) from locality), @max4:=(select max(id) from locality),
    @min5:=(select min(id) from locality_type), @max5:=(select max(id) from
locality_type),
    @min6:=(select min(id) from street), @max6:=(select max(id) from street),
    @min7:=(select min(id) from street_type), @max7:=(select max(id) from
street_type),
        FOREIGN_KEY_CHECKS=0;

INSERT address SELECT
    row_number() over(),
    floor(1+RAND()*200),
    floor(1+RAND()*10),
    concat(floor(1+RAND()*889), char(65+RAND()*26 USING utf8)),
    floor(202115+RAND()*45879),
    floor(@min7+RAND()*(@max7 - @min7 + 1),

```
        floor(@min6+RAND()*(@max6 - @min6 + 1),
        floor(@min5+RAND()*(@max5 - @min5 + 1),
        floor(@min4+RAND()*(@max4 - @min4 + 1),
        floor(@min2+RAND()*(@max2 - @min2 + 1),
        floor(@min3+RAND()*(@max3 - @min3 + 1),
        floor(@min1+RAND()*(@max1 - @min1 + 1)
from street_type, subject limit 10000;
```



```
mysql> source subd/lab573.sql;
Query OK, 118 rows affected (0.08 sec)
Records: 118 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 7 rows affected (0.01 sec)
Records: 7 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 0 rows affected (0.01 sec)

Query OK, 10000 rows affected, 2 warnings (1.04 sec)
Records: 10000 Duplicates: 0 Warnings: 2
```

Задание 4

LOAD DATA INFILE '/var/lib/mysql-files/subj.sql' INTO TABLE subjects
FIELDS TERMINATED BY '|' (name, shortname);
LOAD DATA INFILE '/var/lib/mysql-files/marks.sql' INTO TABLE marks(name);

```
set
        @max1:=(select max(id) from name1),
        @max2:=(select max(id) from name2),
        @max3:=(select max(id) from name3),
        FOREIGN_KEY_CHECKS=0;
insert teacher select
        row_number() over(),
        floor(1+rand()*@max1),
        floor(1+rand()*@max2),
        floor(1+rand()*@max3),
        row_number() over(),
        NOW()
from locality, region limit 1000;
set
```

```
        @max1:=(select max(id) from student),
        @max2:=(select max(id) from subjects),
        @max3:=(select max(id) from grade),
        @max4:=(select max(id) from teacher);
insert final_grade(id_student, id_subject, id_grade, id_teacher) select
        floor(1+rand()*@max1),
        floor(1+rand()*@max2),
        floor(1+rand()*@max3),
        floor(1+rand()*@max4),
from locality, region limit 1000000;
```

```
mysql> source subd/lab5/4.sql;
Query OK, 679 rows affected (0.07 sec)
Records: 679 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 14 rows affected (0.01 sec)
Records: 14 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 0 rows affected (0.01 sec)

Query OK, 1000 rows affected (0.12 sec)
Records: 1000 Duplicates: 0 Warnings: 0

Query OK, 0 rows affected (0.01 sec)

Query OK, 1000000 rows affected (56.43 sec)
Records: 1000000 Duplicates: 0 Warnings: 0
```

Задание 5

LOAD DATA INFILE '/var/lib/mysql-files/departm.sql' INTO TABLE department

LINES STARTING BY '(' TERMINATED BY ')'

(name);

```
mysql> source subd/lab5/5.sql;
Query OK, 32 rows affected (0.08 sec)
Records: 32 Deleted: 0 Skipped: 0 Warnings: 0
```

Задание 6

LOAD DATA INFILE '/var/lib/mysql-files/facult.sql' INTO TABLE faculty

FIELDS TERMINATED BY ',' ENCLOSED BY '\"'

LINES STARTING BY '(' TERMINATED BY ')'

(shortname, fullname);

```
mysql> source subd/lab5/6.sql;
Query OK, 9 rows affected (0.06 sec)
Records: 9 Deleted: 0 Skipped: 0 Warnings: 0
```

Задание 7

INSERT IGNORE INTO temp(name1) value

('кольцо'),('тюрьма'),('парк'),('въезд'),('спуск'),('микрорайнон'),('исправительная колония'),
('тракт'),('набережная'),('лечебно-трудовой профилакторий'),('воспитательная колония'),('шоссе'),
('улица'),('тупик'),('территория'),('станция'),('следственный изолятор'),('проспект'),('проезд'),
('площадь'),('переулок'),('исправительное учреждение ОТ'),('воинская часть'),('бульвар');

set

@n = 1,

FOREIGN_KEY_CHECKS=0;

UPDATE street_type set id=@n:=@n+1 where 0 in(select @n:=0);

```
mysql> source subd/lab5/7.sql;
Query OK, 15 rows affected, 9 warnings (0.07 sec)
Records: 24 Duplicates: 9 Warnings: 9

Query OK, 0 rows affected (0.01 sec)

Query OK, 15 rows affected, 2 warnings (0.01 sec)
Rows matched: 24 Changed: 15 Warnings: 2
```

Задание 8

LOAD DATA INFILE '/var/lib/mysql-files/authority.sql' INTO TABLE authority(name);
LOAD DATA INFILE '/var/lib/mysql-files/profession.sql' INTO TABLE profession(name);
LOAD DATA INFILE '/var/lib/mysql-files/speciality.sql' INTO TABLE speciality(name);
set
@max1:=(select max(id) from address),
@max2:=(select max(id) from authority);

CREATE TABLE temp (id INT UNIQUE NOT NULL AUTO_INCREMENT PRIMARY KEY, name CHAR(2) NOT NULL);

insert temp(name) values ('AB'),('BM'),('HB'),('KH'),('MP'),('MC'),('KB'),('PP'),('SP'),('DP');

insert passport select

row_number() over(),

(select name from temp order by rand() limit 1),

floor(1000000+rand()*8999999), concat(floor(7000000+rand()*999999), 'A', floor(rand()*10), floor(rand()*10), floor(rand()*10), 'PB', floor(rand()*10)),

@date:=DATE_FORMAT(from_unixtime(rand() * (unix_timestamp(CURDATE()) - unix_timestamp('2010-11- 25')) + unix_timestamp('2010-11-25')), '%Y-%m-%d'), date_add(@date, interval 10 year), DATE_FORMAT(from_unixtime(rand() * (CURDATE() - unix_timestamp('1920-01-01')) + unix_timestamp('1920-01-01')), '%Y-%m-%d'), floor(1+rand()*2), floor(1+rand()*@max1), floor(1+rand()*@max1), floor(1+rand()*@max2), floor(1+rand()*@max1) from street, region limit 1000000;

```
mysql> source subd/lab5/8.sql;
Query OK, 2 rows affected (0.01 sec)
Records: 2 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 137 rows affected (0.08 sec)
Records: 137 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 2276 rows affected (0.12 sec)
Records: 2276 Deleted: 0 Skipped: 0 Warnings: 0

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.03 sec)

Query OK, 10 rows affected (0.02 sec)
Records: 10 Duplicates: 0 Warnings: 0

Query OK, 1000000 rows affected, 1 warning (2 min 23.03 sec)
Records: 1000000 Duplicates: 0 Warnings: 1
```

Задание 9

set

@max1:=(select max(id) from passport),

@max2:=(select max(id) from faculty),

@max3:=(select max(id) from department),

@max4:=(select max(id) from speciality),

@max5:=(select max(id) from study_form);

@max7:=(select max(id) from address);

@max8:=(select max(id) from authority);

@max9:=(select max(id) from status);

@max10:=(select max(id) from pay_form);

insert personal select

 row_number() over(),

 floor(1+@r*999999), @date:=concat(floor(2014+@r*6), '-09-01'), date_add(@date, interval floor(4+@r*3) year), floor(1+@r*6),floor(1+@r*@max7),floor(1+@r*@max7),floor(1+@r*@max7), floor(1+(@r:=rand())*@max1), floor(1+@r*@max2), floor(1+@r*@max3), floor(1+@r*@max4),floor(1+@r*@max8), floor(1+@r*2), floor(1+@r*@max5), floor(1 + @r*@max9), floor(1 + @r*@max10)

from street, region limit 1000000;

 set FOREIGN_KEY_CHECKS=1;

```
mysql> source subd/lab5/9.sql;
Query OK, 0 rows affected (0.01 sec)

Query OK, 1000000 rows affected, 2 warning (1 min 13.53 sec)
Records: 1000000 Duplicates: 0 Warnings: 2

Query OK, 0 rows affected (0.01 sec)
```