1) Create

```
 1  use gregs_list;
 2  CREATE TABLE my_contacts(
 3  contact_id INT NOT NULL,
 4  first_name VARCHAR(20) NOT NULL,
 5  last_name VARCHAR(30) NOT NULL,
 6  email VARCHAR(30) NOT NULL,
 7  gender CHAR(1) DEFAULT 'M',
 8  pass VARCHAR(20) DEFAULT '1234'
 9  );
10  DESC my_contacts;
```

Field	Type	Null	Key	Default	Extra
contact_id	int	NO		NULL	
first_name	varchar(20)	NO		NULL	
last_name	varchar(30)	NO		NULL	
email	varchar(30)	NO		NULL	
gender	char(1)	YES		M	
pass	varchar(20)	YES		1234	

2) Insert with using "\" in some field (№9)

```
 1  use gregs_list;
 2  INSERT INTO my_contacts VALUES (1, 'Mary', 'White', 'mw@mw.com', 'F', '1111');
 3  INSERT INTO my_contacts VALUES (2, 'Kate', 'Black', 'kb@kb.com', 'F', '2222');
 4  INSERT INTO my_contacts VALUES (3, 'Julie', 'Gates', 'jg@jg.com', 'F', '3333');
 5  INSERT INTO my_contacts VALUES (4, 'John', 'Smith', 'js@js.com', 'M', '4444');
 6  INSERT INTO my_contacts (contact_id, first_name, last_name, email) VALUES (6, 'Owen', 'Wilson', 'owl@owl.com');
 7  INSERT INTO my_contacts (contact_id, first_name, last_name, email) VALUES (7, 'Kevin', 'Kostner', 'kwkl@kwk.com');
 8  INSERT INTO my_contacts (contact_id, first_name, last_name, email) VALUES (8, 'Rudy', 'Allen', 'ral@ral.com');
 9  INSERT INTO my_contacts VALUES (5, 'Jim', 'Mc\'Gorman', 'jmj@gmg.com', 'M', '5555');
10  SELECT * FROM my_contacts;
```

contact_id	first_name	last_name	email	gender	pass
1	Mary	White	mw@mw.com	F	1111
2	Kate	Black	kb@kb.com	F	2222
3	Julie	Gates	jg@jg.com	F	3333
4	John	Smith	js@js.com	M	4444
6	Owen	Wilson	owl@owl.com	M	1234
7	Kevin	Kostner	kwkl@kwk.com	M	1234
8	Rudy	Allen	ral@ral.com	M	1234
5	Jim	Mc'Gorman	jmj@gmg.com	M	5555

3) Select * where

```
use gregs_list;
SELECT * FROM my_contacts WHERE first_name='Julie';
```

contact_id	first_name	last_name	email	gender	pass
3	Julie	Gates	jg@jg.com	F	3333

4) Select with "\" in some field

```
1  use gregs_list;
2  SELECT * FROM my_contacts WHERE last_name='Mc\'Gorman';
```

contact_id	first_name	last_name	email	gender	pass
5	Jim	Mc'Gorman	jmj@gmg.com	M	5555

5) Select fields where

```
1  use gregs_list;
2  SELECT first_name, email, gender FROM my_contacts WHERE gender='F';
```

first_name	email	gender
Mary	mw@mw.com	F
Kate	kb@kb.com	F
Julie	jg@jg.com	F

6) Select where and

```
1  use gregs_list;
2  SELECT first_name, last_name, gender, pass FROM my_contacts WHERE gender='M' AND pass='1234';
```

first_name	last_name	gender	pass
Owen	Wilson	M	1234
Kevin	Kostner	M	1234
Rudy	Allen	M	1234

7) Select like

```
1  use gregs_list;
2  SELECT first_name, last_name, pass FROM my_contacts WHERE pass LIKE "1%";
```

first_name	last_name	pass
Mary	White	1111
Owen	Wilson	1234
Kevin	Kostner	1234
Rudy	Allen	1234

```
1 use gregs_list;
2 SELECT * FROM my_contacts WHERE first_name LIKE "%a%";
```

contact_id	first_name	last_name	email	gender	pass
1	Mary	White	mw@mw.com	F	1111
2	Kate	Black	kb@kb.com	F	2222

8) Alter table add column / Update Set

```
1  use gregs_list;
2  ALTER TABLE my_contacts ADD height INT NOT NULL;
3  UPDATE my_contacts SET height=155 WHERE first_name='Mary';
4  UPDATE my_contacts SET height=170 WHERE first_name='Kate';
5  UPDATE my_contacts SET height=178 WHERE first_name='Julie';
6  UPDATE my_contacts SET height=190 WHERE first_name='John';
7  UPDATE my_contacts SET height=165 WHERE first_name='Owen';
8  UPDATE my_contacts SET height=171 WHERE first_name='Kevin';
9  UPDATE my_contacts SET height=187 WHERE first_name='Rudy';
10 UPDATE my_contacts SET height=170 WHERE first_name='Jim';
11 SELECT * FROM my_contacts
```

contact_id	first_name	last_name	email	gender	pass	height
1	Mary	White	mw@mw.com	F	1111	155
2	Kate	Black	kb@kb.com	F	2222	170
3	Julie	Gates	jg@jg.com	F	3333	178
4	John	Smith	js@js.com	M	4444	190
6	Owen	Wilson	owl@owl.com	M	1234	165
7	Kevin	Kostner	kwkl@kwk.com	M	1234	171
8	Rudy	Allen	ral@ral.com	M	1234	187
5	Jim	Mc'Gorman	jmj@gmg.com	M	5555	170

9) Select ><=

```
1 use gregs_list;
2 SELECT first_name, last_name, height FROM my_contacts WHERE gender='M' AND height>=170;
```

first_name	last_name	height
John	Smith	190
Kevin	Kostner	171
Rudy	Allen	187
Jim	Mc'Gorman	170

10) Select OR

```
1  use gregs_list;
2  SELECT first_name, last_name, height, email FROM my_contacts WHERE last_name='Smith' OR height=170;
```

first_name	last_name	height	email
Kate	Black	170	kb@kb.com
John	Smith	190	js@js.com
Jim	Mc'Gorman	170	jmj@gmg.com

11) Select between

```
1  use gregs_list;
2  SELECT first_name, last_name, height FROM my_contacts WHERE height BETWEEN 170 AND 180;
```

first_name	last_name	height
Kate	Black	170
Julie	Gates	178
Kevin	Kostner	171
Jim	Mc'Gorman	170

12) Select in

```
1  use gregs_list;
2  SELECT first_name, last_name, email, height FROM my_contacts WHERE email IN('jg@jg.com', 'mw@mw.com');
```

first_name	last_name	email	height
Mary	White	mw@mw.com	155
Julie	Gates	jg@jg.com	178

13) Delete

contact_id	first_name	last_name	email	gender	pass	height
1	Mary	White	mw@mw.com	F	1111	155
2	Kate	Black	kb@kb.com	F	2222	170
3	Julie	Gates	jg@jg.com	F	3333	178
4	John	Smith	js@js.com	M	4444	190
5	Jim	Mc'Gorman	jmj@gmg.com	M	1111	170
6	Owen	Wilson	owl@owl.com	M	1111	165
7	Kevin	Kostner	kwkl@kwk.com	M	1111	171
8	Rudy	Allen	ral@ral.com	M	1111	187
100	Mary	White	test@google.com	M	1234	156
100	Mary	White	test@google.com	M	1234	156
100	Mary	White	test@google.com	M	1234	156
100	Mary	White	test@google.com	M	1234	156
100	Mary	White	test@google.com	M	1234	156

```
1  use gregs_list;
2  DELETE FROM my_contacts WHERE contact_id=100 OR height=170;
3  SELECT * FROM my_contacts;
```

contact_id	first_name	last_name	email	gender	pass	height
1	Mary	White	mw@mw.com	F	1111	155
3	Julie	Gates	jg@jg.com	F	3333	178
4	John	Smith	js@js.com	M	4444	190
6	Owen	Wilson	owl@owl.com	M	1111	165
7	Kevin	Kostner	kwkl@kwk.com	M	1111	171
8	Rudy	Allen	ral@ral.com	M	1111	187

14) Delete all

```
1  use gregs_list;
2  DELETE FROM my_contacts;
3  SELECT * FROM my_contacts;
```

✔ MySQL вернула пустой результат (т.е. ноль строк). (Запрос занял 0,0003 сек.)

```
SELECT * FROM my_contacts
```

15) Insert-Delete

//contact_id INT default 100

//email VARCHAR(30) DEFAULT 'test@google.com'

```
1  use gregs_list;
2  INSERT INTO my_contacts (first_name, last_name, gender, height) VALUES ('Mary', 'White', 'F', 166);
3  DELETE FROM my_contacts WHERE first_name='Mary' AND last_name='White' AND height=155;
4  SELECT * FROM my_contacts;
```

contact_id	first_name	last_name	email	gender	pass	height
2	Kate	Black	kb@kb.com	F	2222	170
3	Julie	Gates	jg@jg.com	F	3333	178
4	John	Smith	js@js.com	M	4444	190
5	Jim	Mc'Gorman	jmj@gmg.com	M	1111	170
6	Owen	Wilson	owl@owl.com	M	1111	165
7	Kevin	Kostner	kwkl@kwk.com	M	1111	171
8	Rudy	Allen	ral@ral.com	M	1111	187
100	Mary	White	test@google.com	F	1234	166

16) Проверка предыдущего перед удалением с помощью Select

```
1 use gregs_list;
2 SELECT * FROM my_contacts WHERE first_name='Mary' AND last_name='White' AND height=155;
```

contact_id	first_name	last_name	email	gender	pass	height
1	Mary	White	mw@mw.com	F	1111	155

17) Update height

```
1 use gregs_list;
2 UPDATE my_contacts SET height=167 WHERE first_name='Mary' AND last_name='White';
3 SELECT * FROM my_contacts;
```

contact_id	first_name	last_name	email	gender	pass	height
2	Kate	Black	kb@kb.com	F	2222	170
3	Julie	Gates	jg@jg.com	F	3333	178
4	John	Smith	js@js.com	M	4444	190
5	Jim	Mc'Gorman	jmj@gmg.com	M	1111	170
6	Owen	Wilson	owl@owl.com	M	1111	165
7	Kevin	Kostner	kwkl@kwk.com	M	1111	171
8	Rudy	Allen	ral@ral.com	M	1111	187
1	Mary	White	mw@mw.com	F	1111	167

18) Update +1

```
1 use gregs_list;
2 UPDATE my_contacts SET height=height+10 WHERE first_name='Mary' OR first_name='Rudy' OR first_name='Kevin';
3 SELECT * FROM my_contacts;
```

contact_id	first_name	last_name	email	gender	pass	height
2	Kate	Black	kb@kb.com	F	2222	170
3	Julie	Gates	jg@jg.com	F	3333	178
4	John	Smith	js@js.com	M	4444	190
5	Jim	Mc'Gorman	jmj@gmg.com	M	1111	170
6	Owen	Wilson	owl@owl.com	M	1111	165
7	Kevin	Kostner	kwkl@kwk.com	M	1111	181
8	Rudy	Allen	ral@ral.com	M	1111	197
1	Mary	White	mw@mw.com	F	1111	177

19) Создание PRIMARY KEY

```
 1 use gregs_list;
 2 CREATE TABLE my_contacts2(
 3 contact_id INT NOT NULL AUTO_INCREMENT,
 4 first_name VARCHAR(20) NOT NULL,
 5 last_name VARCHAR(30) NOT NULL,
 6 email VARCHAR(30) DEFAULT 'test@google.com',
 7 gender CHAR(1) NOT NULL,
 8 height INT NOT NULL,
 9 pass VARCHAR(20) DEFAULT '1234',
10 PRIMARY KEY (contact_id)
11 );
12 SELECT * FROM my_contacts2;
```

20) Insert INTO

```
 1 use gregs_list;
 2 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Mary', 'White', 'mw@mw.com', 'F', 155, '1111');
 3 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Kate', 'Black', 'kb@kb.com', 'F', 170, '2222');
 4 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Julie', 'Gates', 'jg@jg.com', 'F', 178, '3333');
 5 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('John', 'Smith', 'js@js.com', 'M', 190, '4444');
 6 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Jim', 'Mc\'Gorman', 'jmj@gmg.com', 'M', 170, '5555');
 7 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Owen', 'Wilson', 'owl@owl.com', 'M', 165, '6666');
 8 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Kevin', 'Kostner', 'kwkl@kwk.com', 'M', 171, '7777');
 9 INSERT INTO my_contacts2 (first_name, last_name, email, gender, height, pass) VALUES ('Rudy', 'Allen', 'ral@ral.com', 'M', 187, '8888');
10 SELECT * FROM my_contacts2;
```

				contact_id	first_name	last_name	email	gender	height	pass
☐	🖉	📋	✗	1	Mary	White	mw@mw.com	F	155	1111
☐	🖉	📋	✗	2	Kate	Black	kb@kb.com	F	170	2222
☐	🖉	📋	✗	3	Julie	Gates	jg@jg.com	F	178	3333
☐	🖉	📋	✗	4	John	Smith	js@js.com	M	190	4444
☐	🖉	📋	✗	5	Jim	Mc'Gorman	jmj@gmg.com	M	170	5555
☐	🖉	📋	✗	6	Owen	Wilson	owl@owl.com	M	165	6666
☐	🖉	📋	✗	7	Kevin	Kostner	kwkl@kwk.com	M	171	7777
☐	🖉	📋	✗	8	Rudy	Allen	ral@ral.com	M	187	8888

21) Alter Table

```
 1 use gregs_list;
 2 ALTER TABLE my_contacts2 ADD login CHAR(8) NOT NULL AFTER height;
 3 SELECT * FROM my_contacts2;
```

				contact_id	first_name	last_name	email	gender	height	login	pass
☐	🖉	📋	✗	1	Mary	White	mw@mw.com	F	155		1111
☐	🖉	📋	✗	2	Kate	Black	kb@kb.com	F	170		2222
☐	🖉	📋	✗	3	Julie	Gates	jg@jg.com	F	178		3333
☐	🖉	📋	✗	4	John	Smith	js@js.com	M	190		4444
☐	🖉	📋	✗	5	Jim	Mc'Gorman	jmj@gmg.com	M	170		5555
☐	🖉	📋	✗	6	Owen	Wilson	owl@owl.com	M	165		6666
☐	🖉	📋	✗	7	Kevin	Kostner	kwkl@kwk.com	M	171		7777
☐	🖉	📋	✗	8	Rudy	Allen	ral@ral.com	M	187		8888

22) Rename table

```
1 use gregs_list;
2 ALTER TABLE my_contacts2 RENAME TO user_list;
3 SELECT * FROM user_list;
```

23) Change column

```
1 use gregs_list;
2 ALTER TABLE user_list CHANGE COLUMN contact_id id INT NOT NULL AUTO_INCREMENT;
3 SELECT * FROM user_list;
```

				id	first_name	last_name	email	gender	height	login	pass
☐	✏	⌇	✗	1	Mary	White	mw@mw.com	F	155		1111
☐	✏	⌇	✗	2	Kate	Black	kb@kb.com	F	170		2222
☐	✏	⌇	✗	3	Julie	Gates	jg@jg.com	F	178		3333
☐	✏	⌇	✗	4	John	Smith	js@js.com	M	190		4444
☐	✏	⌇	✗	5	Jim	Mc'Gorman	jmj@gmg.com	M	170		5555
☐	✏	⌇	✗	6	Owen	Wilson	owl@owl.com	M	165		6666
☐	✏	⌇	✗	7	Kevin	Kostner	kwkl@kwk.com	M	171		7777
☐	✏	⌇	✗	8	Rudy	Allen	ral@ral.com	M	187		8888

24) Modify column

```
1 use gregs_list;
2 ALTER TABLE user_list MODIFY COLUMN first_name VARCHAR(30);
3 DESCRIBE user_list;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
first_name	varchar(30)	YES		NULL	
last_name	varchar(30)	NO		NULL	
email	varchar(30)	YES		test@google.com	
gender	char(1)	NO		NULL	
height	int	NO		NULL	
login	char(8)	NO		NULL	
pass	varchar(20)	YES		1234	

25) Drop column

```
1 use gregs_list;
2 ALTER TABLE user_list DROP COLUMN gender;
3 SELECT * FROM user_list;
```

				id	first_name	last_name	email	height	login	pass
☐	🖊	🖽	✖	1	Mary	White	mw@mw.com	155	ma01	1111
☐	🖊	🖽	✖	2	Kate	Black	kb@kb.com	170	ka01	2222
☐	🖊	🖽	✖	3	Julie	Gates	jg@jg.com	178	ju01	3333
☐	🖊	🖽	✖	4	John	Smith	js@js.com	190	jo01	4444
☐	🖊	🖽	✖	5	Jim	Mc'Gorman	jmj@gmg.com	170	ji01	5555
☐	🖊	🖽	✖	6	Owen	Wilson	owl@owl.com	165	ow01	6666
☐	🖊	🖽	✖	7	Kevin	Kostner	kwkl@kwk.com	171	ke01	7777
☐	🖊	🖽	✖	8	Rudy	Allen	ral@ral.com	187	ru01	8888

26) Узнать используемые домены email у пользователей

```
1  use gregs_list;
2  Select SUBSTRING_INDEX(email,'@', -1) AS email_domains FROM user_list;
```

email_domains
mw.com
kb.com
jg.com
js.com
gmg.com
owl.com
kwk.com
ral.com

27) Update Case

```
1  USE gregs_list;
2  ALTER TABLE user_list ADD COLUMN pass_comment varchar(50);
3  UPDATE user_list SET pass_comment=
4  CASE
5  WHEN pass='1234' THEN 'Слишком простой пароль'
6  ELSE 'Хороший пароль'
7  END;
8  SELECT * FROM user_list;
```

id	first_name	last_name	email	height	login	pass	pass_comment
1	Mary	White	mw@mw.com	155	ma01	1234	Слишком простой пароль
2	Kate	Black	kb@kb.com	170	ka01	2222	Хороший пароль
3	Julie	Gates	jg@jg.com	178	ju01	3333	Хороший пароль
4	John	Smith	js@js.com	190	jo01	4444	Хороший пароль
5	Jim	Mc'Gorman	jmj@gmg.com	170	ji01	1234	Слишком простой пароль
6	Owen	Wilson	owl@owl.com	165	ow01	1234	Слишком простой пароль
7	Kevin	Kostner	kwkl@kwk.com	171	ke01	1234	Слишком простой пароль
8	Rudy	Allen	ral@ral.com	187	ru01	8888	Хороший пароль

28) Order by

```sql
1  USE gregs_list;
2  SELECT first_name AS Имя, last_name AS Фамилия, pass AS Лучший_в_мире_пароль
3  FROM user_list WHERE pass_comment='Хороший пароль'
4  ORDER BY first_name;
```

Имя	Фамилия	Лучший_в_мире_пароль
John	Smith	4444
Julie	Gates	3333
Kate	Black	2222
Rudy	Allen	8888

29) Group by, order by

```sql
1  USE gregs_list;
2  CREATE TABLE flash_drives(
3  id INT NOT NULL AUTO_INCREMENT,
4  first_name VARCHAR(20) NOT NULL,
5  last_name VARCHAR(30) NOT NULL,
6  purchase_date DATE,
7  flashcount INT DEFAULT 1,
8  PRIMARY KEY (id)
9  );
```

```sql
1  USE gregs_list;
2  SELECT first_name AS Имя, last_name AS Фамилия, SUM(flashcount) AS Куплено_флешек FROM flash_drives
3  GROUP BY first_name, last_name
4  ORDER BY SUM(flashcount) DESC;
```

Имя	Фамилия	Куплено_флешек
Mary	White	9
Kate	Black	8
Julie	Gates	8
John	Smith	8
Jim	Mc'Gorman	8
Owen	Wilson	7
Kevin	Kostner	7
Rudy	Allen	7

30) Limit

```sql
1  USE gregs_list;
2  SELECT first_name AS Имя, last_name AS Фамилия, SUM(flashcount) AS Куплено_флешек FROM flash_drives
3  GROUP BY first_name, last_name
4  ORDER BY SUM(flashcount) DESC LIMIT 3;
```

Имя	Фамилия	Куплено_флешек
Mary	White	9
Kate	Black	8
Julie	Gates	8

Имя	Фамилия	Куплено_флешек
Mary	White	9
Kate	Black	8
Julie	Gates	8