

Practical no:1

1.mysql> CREATE DATABASE school;

2.mysql> USE school;

Database changed

3.mysql> CREATE TABLE students (id INT PRIMARY KEY, name VARCHAR(100), age INT, grade VARCHAR(10));

4.mysql> CREATE TABLE students_copy AS SELECT * FROM students;

5.mysql> SHOW TABLES;

```
+-----+
| Tables_in_school |
```

```
+-----+
| students      |
| students_copy |
```

```
+-----+
2 rows in set (0.01 sec)
```

6.mysql> CREATE TABLE students_specific_fields AS SELECT id, name FROM students;

7.mysql> DESCRIBE students_copy;

```
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int       | NO   |     | NULL    |       |
| name  | varchar(100) | YES  |     | NULL    |       |
| age   | int       | YES  |     | NULL    |       |
| grade | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

8.mysql> DESCRIBE students_specific_fields;

```
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int       | NO   |     | NULL    |       |
| name  | varchar(100) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```

2 rows in set (0.00 sec)

9.mysql> CREATE TABLE students_excluding_record AS SELECT * FROM students WHERE id != 1;

10.mysql> DESCRIBE students_excluding_record;

```
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| id    | int       | NO   |     | NULL    |       |
| name  | varchar(100) | YES  |     | NULL    |       |
| age   | int       | YES  |     | NULL    |       |
| grade | varchar(10) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

11.mysql> CREATE TABLE students_no_records AS SELECT * FROM students WHERE 1 = 0;

12.mysql> ALTER TABLE students ADD email VARCHAR(100);

13.mysql> DESCRIBE students;

```
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| id    | int       | NO   | PRI | NULL    |       |
| name  | varchar(100) | YES  |     | NULL    |       |
| age   | int       | YES  |     | NULL    |       |
| grade | varchar(10) | YES  |     | NULL    |       |
| email | varchar(100) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

14.mysql> ALTER TABLE students MODIFY name VARCHAR(200);

15.mysql> DESCRIBE students;

```
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| id    | int       | NO   | PRI | NULL    |       |
| name  | varchar(200) | YES  |     | NULL    |       |
| age   | int       | YES  |     | NULL    |       |
| grade | varchar(10) | YES  |     | NULL    |       |
| email | varchar(100) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

16.mysql> ALTER TABLE students DROP COLUMN email;

17.mysql> ALTER TABLE students RENAME TO pupils;

18.mysql> SHOW TABLES;

```
+-----+
| Tables_in_school |
+-----+
| pupils           |
| students_copy    |
| students_excluding_record |
| students_no_records |
| students_specific_fields |
+-----+
5 rows in set (0.00 sec)
```

19.mysql> ALTER TABLE PUPILS RENAME COLUMN name TO full_name;

20.mysql> DESCRIBE pupils;

```
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id     | int       | NO   | PRI | NULL    |       |
| full_name | varchar(200) | YES |     | NULL    |       |
| age    | int       | YES  |     | NULL    |       |
| grade  | varchar(10) | YES |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

21.mysql> CREATE VIEW all_pupils_view AS SELECT * FROM pupils; SELECT * FROM all_pupils_view;

ERROR 1050 (42S01): Table 'all_pupils_view' already exists

```
+----+-----+-----+-----+
| id | full_name | age | grade |
+----+-----+-----+-----+
| 1 | Avinash   | 20 | TY    |
| 2 | Rohit     | 20 | TY    |
| 3 | Prasad    | 20 | TY    |
| 4 | Atharava  | 20 | TY    |
+----+-----+-----+-----+
4 rows in set (0.00 sec)
```

22.mysql> CREATE VIEW specific_fields_pupils_view AS SELECT id, full_name FROM pupils; SELECT * FROM specific_fields_pupils_view;

```
+----+-----+
| id | full_name |
+----+-----+
```

1	Avinash	
2	Rohit	
3	Prasad	
4	Atharava	

4 rows in set (0.00 sec)

23.mysql> CREATE VIEW specific_pupil_record_view AS SELECT * FROM pupils WHERE id = 1; SELECT * FROM specific_pupil_record_view;

id	full_name	age	grade
1	Avinash	20	TY

1 row in set (0.00 sec)

24.mysql> CREATE OR REPLACE VIEW pupils_age_above_10_view AS SELECT * FROM pupils WHERE age > 10; SELECT * FROM pupils_age_above_10_view;

id	full_name	age	grade
1	Avinash	20	TY
2	Rohit	20	TY
3	Prasad	20	TY
4	Atharava	20	TY

4 rows in set (0.00 sec)

25.mysql> SELECT * FROM pupils;

id	full_name	age	grade
1	Avinash	20	TY
2	Rohit	20	TY
3	Prasad	20	TY
4	Atharava	20	TY

4 rows in set (0.00 sec)

26.mysql> SELECT * FROM pupils WHERE id = 1;

id	full_name	age	grade
1	Avinash	20	TY

$$+ \text{---} + \text{---} + \text{---} + \text{---} +$$

```
27.mysql> UPDATE pupils SET grade = 'Final Year' WHERE id = 1;
```

```
28.mysql> SELECT * FROM pupils WHERE id = 1;
```

-----+

id	full name	age	grade
----	-----------	-----	-------

1	Avinash	20	Final Year
---	---------	----	------------

+

1 row in set (0.00 sec)

```
29.mysql> DELETE FROM pupils WHERE id = 2;
```

```
30.mysql> SELECT * FROM pupils;
```

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id	full name	age	grade
----	-----------	-----	-------

1	Avinash	20	Final Year
---	---------	----	------------

3	Prasad	20	TY
---	--------	----	----

4	Atharava	20	TY
---	----------	----	----

-----+

3 rows in set (0.00 sec)

```
31.mysql> CREATE INDEX idx_full_name ON pupils (full_name);
show indexes from pupils;
```

Table	Non unique	Key name	Seq in index	Column name	Collation
-------	------------	----------	--------------	-------------	-----------

Cardin	Avinashty	Sub part	Packed	Null	Index type	Comment	Index comment
--------	-----------	----------	--------	------	------------	---------	---------------

Visible | Expression |

pupils	0	PRIMARY	1	id	A	3	NULL	NULL	
---------------	----------	----------------	----------	-----------	----------	----------	-------------	-------------	--

BTREE			YES	NULL	
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pupils	1	idx_full_name	1	full_name	A	3	NULL	NULL
--------	---	---------------	---	-----------	---	---	------	------

YES	BTREE		

	YES	NULL	
--	-----	------	--

2 rows in set (0.01 sec)