

Steps:

Creating Database my_db which we will be taking backup of.

Showing the list of existing db.

```
mysql> create database my_db;
Query OK, 1 row affected (0.15 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| clinicalsdb |
| employeedb |
| information_schema |
| my_db |
| mysql |
| passengerdb |
| performance_schema |
| projectdb |
| sakila |
| studentdb |
| sys |
| world |
+-----+
12 rows in set (0.00 sec)
```

Switching to the new created database, and creating few tables such as **people** and with record.

```
mysql> use my_db;
Database changed
mysql> CREATE TABLE People(
-> id int NOT NULL AUTO_INCREMENT,
-> name varchar(45) NOT NULL,
-> occupation varchar(35) NOT NULL,
-> age int,
-> PRIMARY KEY (id)
-> );
Query OK, 0 rows affected (0.52 sec)
```

```
mysql> INSERT INTO People (id, name, occupation, age)
-> VALUES (101, 'Peter', 'Engineer', 32);
Query OK, 1 row affected (0.35 sec)

mysql> INSERT INTO People VALUES
-> (102, 'Joseph', 'Developer', 30),
-> (103, 'Mike', 'Leader', 28),
-> (104, 'Stephen', 'Scientist', 45);
Query OK, 3 rows affected (0.07 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> select * from People;
+----+-----+-----+-----+
| id | name   | occupation | age |
+----+-----+-----+-----+
| 101 | Peter  | Engineer   | 32  |
| 102 | Joseph | Developer  | 30  |
| 103 | Mike   | Leader     | 28  |
| 104 | Stephen | Scientist  | 45  |
+----+-----+-----+-----+
4 rows in set (0.02 sec)
```

In the same database shwetha_db we are creating second table as **books** and inserting values in the table.

```
mysql> create table books(  
-> book_id int not null auto_increment,  
-> author_name varchar (255),  
-> book_name varchar(225),  
-> price int,  
-> ratings float,  
-> primary key(book_id));  
Query OK, 0 rows affected (0.28 sec)
```

```
mysql> insert into books  
-> values(2,'Kylie Brant','The Dark Places',300, 4.7),  
-> (3, 'Alex','The Silent Patient',250,'4.2');  
Query OK, 2 rows affected (0.04 sec)  
Records: 2 Duplicates: 0 Warnings: 0  
  
mysql> select * from books;  
+-----+-----+-----+-----+-----+  
| book_id | author_name | book_name | price | ratings |  
+-----+-----+-----+-----+-----+  
| 1 | B.A.Paris | The Therapist | 255 | 4.5 |  
| 2 | Kylie Brant | The Dark Places | 300 | 4.7 |  
| 3 | Alex | The Silent Patient | 250 | 4.2 |  
+-----+-----+-----+-----+-----+  
3 rows in set (0.00 sec)
```

These are the current tables in my_db database.

```
mysql> show tables;  
+-----+  
| Tables_in_my_db |  
+-----+  
| books |  
| people |  
+-----+  
2 rows in set (0.01 sec)
```

Now we will be executing below python code.

CODE:

```
import mysql.connector as m
```

```
# database which you want to backup
```

```
db = 'my_db'
```

```
print('Connecting database...')
```

```
connection = m.connect(host='localhost', user='root',password='root', database=db)
```

```
cursor = connection.cursor()
```

```
print('Database connected')
```

```
# Getting all the table names
cursor.execute('SHOW TABLES;')

tables = cursor.fetchall()
table_names = []
for record in tables:
    table_names.append(record[0])
backup_dbname = db + '_backup'
print('Creating backup databse named as', backup_dbname)
cursor.execute(f'CREATE DATABASE {backup_dbname}')
cursor.execute(f' SELECT DATABASE();')
print('current databse:',cursor.fetchall())
cursor.execute(f' USE {backup_dbname}')
cursor.execute(f' SELECT DATABASE();')
print('Switched to',cursor.fetchall())

for table_name in table_names:
    cursor.execute(f'CREATE TABLE {table_name} SELECT * FROM {db}.{table_name}')
```

Output:

```
Connecting database...
Database connected
Creating backup databse named as my_db_backup
current databse: [('my_db',)]
Switched to [('my_db_backup',)]
|
```

Once our code is executed it will create new database my_db_backup database, as shown below we can see my_db_backup database created.

```
mysql> show databases;
+-----+
| Database |
+-----+
| clinicalsdb |
| employeedb |
| information_schema |
| my_db |
| my_db_backup |
| mysql |
| passengerdb |
| performance_schema |
| projectdb |
| sakila |
| studentdb |
| sys |
| world |
+-----+
13 rows in set (0.00 sec)
```

```
mysql> use my_db_backup;
Database changed
mysql> select database();
+-----+
| database() |
+-----+
| my_db_backup |
+-----+
1 row in set (0.00 sec)
```

We can see that we have successfully created the backup for database *my_db* in *my_db_backup*, As all the tables from *my_db* database can be also found in *my_db_backup*, with every record.

```
mysql> show tables;
+-----+
| Tables_in_my_db_backup |
+-----+
| books |
| people |
+-----+
2 rows in set (0.00 sec)
```

```
mysql> select * from people;
+----+-----+-----+-----+
| id | name   | occupation | age |
+----+-----+-----+-----+
| 101 | Peter  | Engineer   | 32 |
| 102 | Joseph | Developer  | 30 |
| 103 | Mike   | Leader     | 28 |
| 104 | Stephen | Scientist  | 45 |
+----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from books;
+-----+-----+-----+-----+-----+
| book_id | author_name | book_name          | price | ratings |
+-----+-----+-----+-----+-----+
| 1 | B.A.Paris | The Therapist      | 255 | 4.5 |
| 2 | Kylie Brant | The Dark Places    | 300 | 4.7 |
| 3 | Alex | The Silent Patient | 250 | 4.2 |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

Below are the values in authors and students table. So using python code we have a backup of our shwetha_db in our new database shwetha_db_backup.

```
mysql> select * from authors;
+-----+-----+-----+
| id  | name  | email      |
+-----+-----+-----+
| 1   | Vivek | xuz@abc.com |
| 2   | Priya | p@gmail.com |
| 3   | Tom   | tom@yahoo.com |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from students;
+-----+-----+-----+
| rollno | name  | division      |
+-----+-----+-----+
| 1   | Robin | robin@yahoo.com |
| 2   | Kevin | kevin@yahoo.com |
| 3   | Stormi | stormi@yahoo.com |
+-----+-----+-----+
3 rows in set (0.00 sec)
```