

working with mysql database server

if we want to working with mysql database server,to required two things,they are

Mysql server

mysql-connector-python, mysqlclient

ex:

C:\Python310\Scripts>pip install mysql-connector-python

ex1:

wap to create a database/schema?

create database databasename;

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306)
print("Connection Establish")
cur_obj=conn_obj.cursor()
cur_obj.execute("create database employe")
print("Database created Successfully")
cur_obj.close()
conn_obj.close()
print("Connection Closeing")
```

output:

Connection Establish
Database created Successfully
Connection Closeing

ex2:

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306)
print("Connection Establish")
cur_obj=conn_obj.cursor()
cur_obj.execute("use employe")
print("connect the employe database")
cur_obj.execute("create table emp(eid integer primary key,\
    ename varchar(20),sal double(6,2),dno integer)")
print("Table Created Successfully")
cur_obj.close()
```

```
conn_obj.close()
print("Connection Closeing")
```

output:

```
-----
Connection Establish
connect the employe database
Table Created Successfully
Connection Closeing
```

ex3:

wap to insert the data into the database?

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306,database="employe")
print("Connection Establish")
cur_obj=conn_obj.cursor()
cur_obj.execute("insert into emp values(101,'siva',3000,10)")
cur_obj.execute("insert into emp values(102,'rama',3100,20)")
cur_obj.execute("insert into emp values(103,'sachin',2900,30)")
cur_obj.execute("insert into emp values(104,'dhoni',3000,10)")
cur_obj.execute("insert into emp values(105,'krishna',3100,30)")
print("Records are Inserted Successfully")
cur_obj.execute("commit")
print("commit completed")
cur_obj.close()
conn_obj.close()
print("Connection Closeing")
```

output:

```
-----
Connection Establish
Records are Inserted Successfully
commit completed
Connection Closeing
```

ex4:

wap to retrieve the data from the database?

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306,database="employe")
print("Connection Establish")
cur_obj=conn_obj.cursor()
cur_obj.execute("select * from emp")
for rec in cur_obj:
    print(rec)
```

```
cur_obj.close()
conn_obj.close()
print("Connection Closeing")
```

output:

```
-----
Connection Establish
(101, 'siva', 3000.0, 10)
(102, 'rama', 3100.0, 20)
(103, 'sachin', 2900.0, 30)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
Connection Closeing
```

ex5:

wap to print employe data which employe working under department number 10?

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306,database="employe")
print("Connection Establish")
cur_obj=conn_obj.cursor()
cur_obj.execute("select * from emp where dno=10")
for rec in cur_obj:
    print(rec)
cur_obj.close()
conn_obj.close()
print("Connection Closeing")
```

output:

```
-----
Connection Establish
(101, 'siva', 3000.0, 10)
(104, 'dhoni', 3000.0, 10)
Connection Closeing
```

ex6:

wap to print employe data in ascending order based on salary?

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306,database="employe")
print("Connection Establish")
cur_obj=conn_obj.cursor()
cur_obj.execute("select * from emp order by sal")
for rec in cur_obj:
    print(rec)
cur_obj.close()
```

```
conn_obj.close()
print("Connection Closeing")
```

output:

```
-----
Connection Establish
(103, 'sachin', 2900.0, 30)
(101, 'siva', 3000.0, 10)
(104, 'dhoni', 3000.0, 10)
(102, 'rama', 3100.0, 20)
(105, 'krishna', 3100.0, 30)
Connection Closeing
```

ex7:

wap to update the data?

```
import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306,database="employe")
print("Connection Establish")
cur_obj=conn_obj.cursor()
print("before update")
cur_obj.execute("select * from emp")
for rec in cur_obj:
    print(rec)
cur_obj.execute("update emp set sal=4000 where ename like 's%'")
print("updated successfully")
print("after update")
cur_obj.execute("select * from emp")
for rec in cur_obj:
    print(rec)
try:
    cur_obj.execute("rollback")
    print("rollback completed")
except:
    pass
else:
    print("after rollback")
    cur_obj.execute("select * from emp")
    for rec in cur_obj:
        print(rec)
finally:
    cur_obj.close()
    conn_obj.close()
    print("Connection Closeing")
```

output:

```
-----
Connection Establish
```

```

before update
(101, 'siva', 3500.0, 10)
(102, 'rama', 3100.0, 20)
(103, 'sachin', 3500.0, 30)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
updated successfully
after update
(101, 'siva', 4000.0, 10)
(102, 'rama', 3100.0, 20)
(103, 'sachin', 4000.0, 30)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
rollback completed
after rollback
(101, 'siva', 3500.0, 10)
(102, 'rama', 3100.0, 20)
(103, 'sachin', 3500.0, 30)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
Connection Closeing

```

ex8:

wap to delete the data?

```

import mysql.connector
conn_obj=mysql.connector.connect(user="root",password="root",
                                host="localhost",port=3306,database="employe")
print("Connection Establish")
cur_obj=conn_obj.cursor()
print("before delte")
cur_obj.execute("select * from emp")
for rec in cur_obj:
    print(rec)
cur_obj.execute("delete from emp where ename like 's%'")
print("deleted successfully")
print("after delete")
cur_obj.execute("select * from emp")
for rec in cur_obj:
    print(rec)
try:
    cur_obj.execute("commit")
    print("commit completed")
    cur_obj.execute("rollback")
    print("rollback completed")
except:
    print("once commit the transaction we can't rollback the data")
else:
    print("after rollback")

```

```
cur_obj.execute("select * from emp")
for rec in cur_obj:
    print(rec)
finally:
    cur_obj.close()
    conn_obj.close()
    print("Connection Closeing")
```

output:

```
-----
Connection Establish
before delte
(101, 'siva', 3500.0, 10)
(102, 'rama', 3100.0, 20)
(103, 'sachin', 3500.0, 30)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
deleted successfully
after delete
(102, 'rama', 3100.0, 20)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
commit completed
rollback completed
after rollback
(102, 'rama', 3100.0, 20)
(104, 'dhoni', 3000.0, 10)
(105, 'krishna', 3100.0, 30)
Connection Closeing
```