

1. Install MySQL
2. Install Python 2.7 (Currently supported up to Python 2.7 only on windows)
3. Install MySQL python driver to access MySQL database through Python
(<https://pypi.python.org/pypi/MySQL-python/1.2.5>)

import MySQLdb

Set database connection

```
db = MySQLdb.connect("localhost")
```

Open Cursor

```
c1 = db.cursor()
```

Use test database using execute method of the cursor

```
c1.execute("use test")
```

Create table using the execute method of the cursor

```
c1.execute("create table t1 (prn int, name text(20))")
```

Insert records in the table

```
C1.execute("insert into t1 values(1, 'Amit')")
```

```
C1.execute("insert into t1 values(2, 'Raj')")
```

```
C1.execute("insert into t1 values(3, 'Kundan')")
```

The above insert statements will insert records in the table temporarily. To insert these records permanently use commit method of the database object as following.

```
db.commit()           'make the changes permanent   OR
```

To Undo the changes, we can use the rollback method of the database object as following

```
Db.rollback()
```

Selecting from table using the execute method of the cursor

```
c1.execute("select * from t1")
```

Returned value is number of records read from the table.

```
t=c1.execute("select * from t1")
```

```
print("No of records read" + str(t))
```

Reading all records using fetchall() method

```
t=c1.fetchall()
```

```
print(t)
```

output : all read records are stored in a list with name t

All the fetched records can also be accessed using a loop

```
for r in t:
```

```
    print(r, r[0], r[1])
```

The records can be accessed one by one using fetchone() method

```
t=c1.fetchone()           'read first record
```

```
print(t)
```

```
t=c1.fetchone()           'read second record
```

```
print(t)
t=c1.fetchone()      'read third record
print(t)
```

Check whether end of recordset has reached

```
t=c1.fetchone()
if (t):
    print(t)
else:
    'OR if not (t):
    print("End of the recordset")
```

Access all records using a loop

```
t=c1.execute("select * from t1")
while(True):
    r=c1.fetchone()
    if not(r):
        'end of record set
        break; 'so break the loop
    print(r)      'else process the record
```

```
t=c1.execute("select * from t1")
rows=c1.fetchall()
for r in rows:
    print(r)
```

Delete a record

```
c1.execute("delete from t1 where n2 = 'aaa'")
db.commit()      'make the changes permanent  OR
db.rollback()    'undo the changes
```

Insert a record

```
c1.execute("insert into t1 values(5, 'eee'")
db.commit()      'make the changes permanent  OR
db.rollback()    'undo the changes
```

Update a record

```
c1.execute("update t1 set n2 = ucase(n2) where n1 = 2")
db.commit()      'make the changes permanent  OR
db.rollback()    'undo the changes
```

Close Database connection

```
db.close()
```