**Creating a Database and Running Select query:**

import sqlite3

def create\_table():

conn = sqlite3.connect('myclass.db')

conn.execute('''CREATE TABLE IF NOT EXISTS students

(id INTEGER PRIMARY KEY AUTOINCREMENT,

first\_name TEXT NOT NULL,

last\_name TEXT NOT NULL,

roll\_number INTEGER NOT NULL,

address TEXT NOT NULL);''')

conn.close()

def add\_student(first\_name, last\_name, roll\_number, address):

conn = sqlite3.connect('myclass.db')

conn.execute('''INSERT INTO students (first\_name, last\_name, roll\_number, address)

VALUES (?, ?, ?, ?);''', (first\_name, last\_name, roll\_number, address))

conn.commit()

conn.close()

def display\_students():

conn = sqlite3.connect('myclass.db')

students = conn.execute("SELECT \* FROM students;").fetchall()

for student in students:

print(student)

conn.close()

create\_table()

add\_student("Om", "Kadam", 37, "Goregaon")

add\_student("Manav", "Ghadi", 29, "Borivali")

add\_student("Devansh", "Mistry", 46, "Kandivali")

display\_students()

**Define Class:**

import sqlite3

class MyClassDatabase:

def \_\_init\_\_(self):

self.conn = sqlite3.connect('myclass.db')

self.create\_table()

def \_\_del\_\_(self):

self.conn.close()

def create\_table(self):

self.conn.execute('''CREATE TABLE IF NOT EXISTS students

(id INTEGER PRIMARY KEY AUTOINCREMENT,

first\_name TEXT NOT NULL,

last\_name TEXT NOT NULL,

roll\_number INTEGER NOT NULL,

address TEXT NOT NULL);''')

def add\_student(self, first\_name, last\_name, roll\_number, address):

self.conn.execute('''INSERT INTO students (first\_name, last\_name, roll\_number, address)

VALUES (?, ?, ?, ?);''', (first\_name, last\_name, roll\_number, address))

self.conn.commit()

def display\_students(self):

students = self.conn.execute("SELECT \* FROM students;").fetchall()

for student in students:

print(student)

my\_db = MyClassDatabase()

my\_db.add\_student("Om", "Kadam", 37, "Goregaon")

my\_db.add\_student("Manav", "Ghadi", 29, "Borivali")

my\_db.add\_student("Devansh", "Mistry", 46, "Kandivali")

my\_db.display\_students()

**Automate using Functions:**

import sqlite3

def create\_database(database\_name):

conn = sqlite3.connect(database\_name)

conn.close()

def create\_table(database\_name, table\_name):

conn = sqlite3.connect(database\_name)

conn.execute(f'''CREATE TABLE IF NOT EXISTS {table\_name}

(id INTEGER PRIMARY KEY AUTOINCREMENT,

first\_name TEXT NOT NULL,

last\_name TEXT NOT NULL,

roll\_number INTEGER NOT NULL,

address TEXT NOT NULL);''')

conn.close()

def add\_student(database\_name, table\_name, first\_name, last\_name, roll\_number, address):

conn = sqlite3.connect(database\_name)

conn.execute(f'''INSERT INTO {table\_name} (first\_name, last\_name, roll\_number, address)

VALUES (?, ?, ?, ?);''', (first\_name, last\_name, roll\_number, address))

conn.commit()

conn.close()

def display\_students(database\_name, table\_name):

conn = sqlite3.connect(database\_name)

students = conn.execute(f"SELECT \* FROM {table\_name};").fetchall()

for student in students:

print(student)

conn.close()

def main():

database\_name = 'myclass.db'

table\_name = 'students'

create\_database(database\_name)

create\_table(database\_name, table\_name)

add\_student(database\_name, table\_name, "Om", "Kadam", 37, "Goregaon")

add\_student(database\_name, table\_name, "Manav", "Ghadi", 29, "Borivali")

add\_student(database\_name, table\_name, "Devansh", "Mistry", 46, "Kandivali")

display\_students(database\_name, table\_name)

if \_\_name\_\_ == '\_\_main\_\_':

main()

**OUTPUT:**

