Creating General Query Action

Date	17 November 2022
Team ID	PNT2022TMID49300
Project Name	AI Based Discourse for Banking Industry

Connecting to SQlite Database

- To use SQLite, we must import **sqlite3**

  import sqlite3

- Then create a connection using connect() method and pass the name of the database you want to access if there is a file with that name, it will open that file. Otherwise, Python will create a file with the given name.

  sqliteConnection = sqlite3.connect('gfg.db')

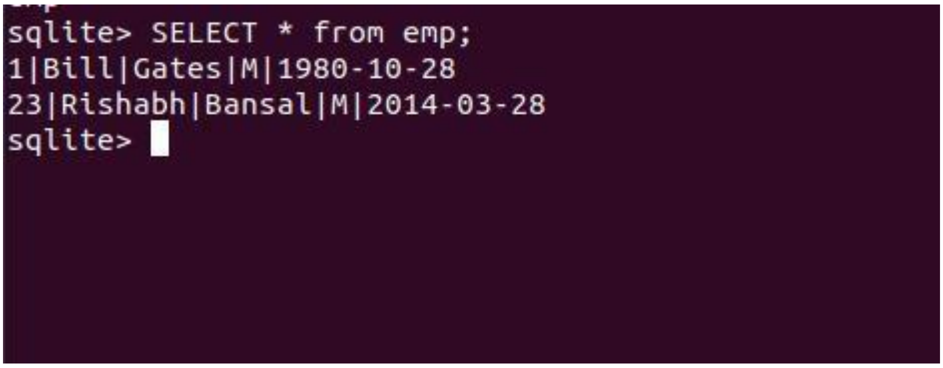
- After this, a cursor object is called to be capable to send commands to the SQL.

cursor = sqliteConnection.cursor()

```
# Python code to demonstrate table creation

and # insertions with SQL


# importing

Module Import

sqlite3

# connecting to the database

connection =sqlite3.connect("gfg.db")

          # cursor
```

```
 crsr = connection.cursor()

  # SQL command to insert the data in the table

sql_command = """INSERT INTO emp VALUES (23, "Rishabh",\
"Bansal", "M", "2014-03-28");"""

crsr.execute(sql_command)


# another SQL command to insert the data in the table

sql_command = """INSERT INTO emp VALUES (1, "Bill", "Gates",\
"M", "1980-10-28");"""

crsr.execute(sql_command)

# To save the changes in the files. Never skip this.

# If we skip this, nothing will be saved in the database.



connection.commit()

# close the

Connection

 connection.close()
```

Output:



```
sqlite> SELECT * from emp;
1|Bill|Gates|M|1980-10-28
23|Rishabh|Bansal|M|2014-03-28
sqlite> 
```

Fetching Data

In this section, we have discussed how to create a table and how to add new rows in the database. Fetching the data from records is simple as inserting them. The execute method uses the SQL command of getting all the data from the table using “Select * from table_name” and all the table data can be fetched in an object in the form of a list of lists.

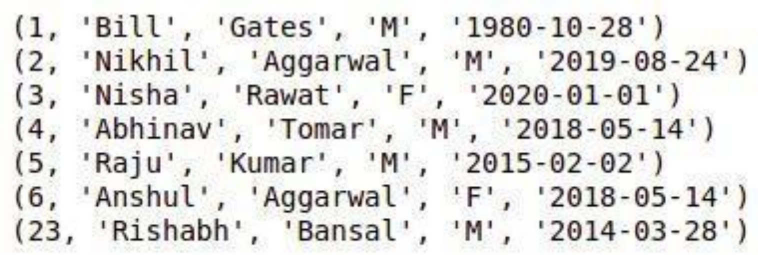
Example: Reading Data from sqlite3 table using Python

Python

```
# importing the

 module import sqlite3


# connect with the myTable database

 connection = sqlite3.connect("gfg.db")



# cursor object

crsr =connection.cursor

# execute the command to fetch all the data from the table

 emp crsr.execute("SELECT * FROM emp")

# store all the fetched data in the ans

variable ans = crsr.fetchall()


# Since we have already selected all the data entries

# using the "SELECT *" SQL command and stored them in #

 the ans variable, all
```

```
# out the ans

 variable for i in ans:

print(i)
```

Output:



```
(1, 'Bill', 'Gates', 'M', '1980-10-28')
(2, 'Nikhil', 'Aggarwal', 'M', '2019-08-24')
(3, 'Nisha', 'Rawat', 'F', '2020-01-01')
(4, 'Abhinav', 'Tomar', 'M', '2018-05-14')
(5, 'Raju', 'Kumar', 'M', '2015-02-02')
(6, 'Anshul', 'Aggarwal', 'F', '2018-05-14')
(23, 'Rishabh', 'Bansal', 'M', '2014-03-28')
```

Updating Data

For updating the data in the SQLite3 table we will use the UPDATE statement. We can update single columns as well as multiple columns using the UPDATE statement as per our requirement.

```
UPDATE table_name SET column1 = value1, column2 = value2,…

WHERE condition;
```

In the above syntax, the SET statement is used to set new values to the particular column, and the WHERE clause is used to select the rows for which the columns are needed to be updated.

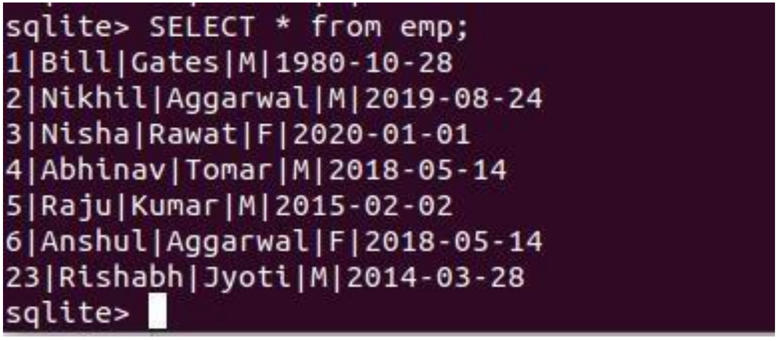
Example: Updating SQLite3 table using Python

Python3

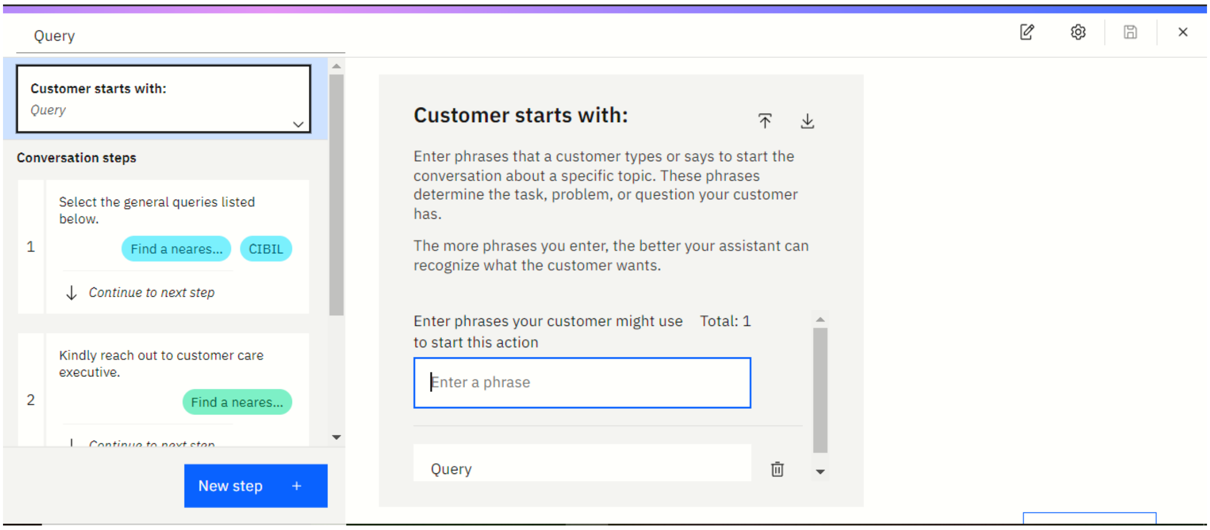
```
# Import

 module import

sqlite3



# Connecting

 ('gfg.db')
```

```
to sqlite

conn = sqlite3.connect

# Creating a cursor object using

 # the cursor() method

cursor = conn.cursor()


# Updating

cursor.execute('''UPDATE emp SET lname = "Jyoti" WHERE
fname="Rishabh";''')


# Commit your changes in the

 database conn.commit()

# Closing the connection conn.close()
```

Output:



```
sqlite> SELECT * from emp;
1|Bill|Gates|M|1980-10-28
2|Nikhil|Aggarwal|M|2019-08-24
3|Nisha|Rawat|F|2020-01-01
4|Abhinav|Tomar|M|2018-05-14
5|Raju|Kumar|M|2015-02-02
6|Anshul|Aggarwal|F|2018-05-14
23|Rishabh|Jyoti|M|2014-03-28
sqlite> 
```



Query

Customer starts with:
Query

Conversation steps

1 Select the general queries listed below.

2 Kindly reach out to customer care executive.

Customer starts with:

Enter phrases that a customer types or says to start the conversation about a specific topic. These phrases determine the task, problem, or question your customer has.

The more phrases you enter, the better your assistant can recognize what the customer wants.

Enter phrases your customer might use to start this action Total: 1

Query