

QUERY 1

ABC.py M X

Part_3 > ABC.py > main

```
19
20 # if __name__ == '__main__':
21 #     create_connection(r"Part_3/ABC.sqlite")
22
23
24 def close_connection(conn):
25     conn.close
26     print("The connection with the database has been closed. ")
27
28 """
29 insert: define functions here
30 """
31
32 def select_questionOne(conn, other):
33     """
34     Query Sites by address
35     :param conn: the connection object
36     :param other: Address given in query
37     :return:
38     """
39     print("in question one")
40
41     cur=conn.cursor()
42
43     wrapped_other = ("%/%"+other+"%/"),
44
45     cur.execute("SELECT * FROM Site WHERE address LIKE ?", wrapped_other)
46
47     records = cur.fetchall()
48
49
50     if((len(records)) != 0):
51         for row in records:
52             print(row)
53     else:
54         print ("No matching rows returned.")
55
56
57     close_connection(conn)
58
59 def select_questionTwo(conn, schedulerSystemInput):
60     """
61     Query DigitalDisplay, Specializes, TechnicalSupport by schedulerSystem
62     :param conn: the connection object
63     :param schedulerSystemInput: schedulerSystem entered in query
64     :return:
65     """
```

PROBLEMS TERMINAL OUTPUT DEBUG CONSOLE

powershell + - [] [] ... ^

```
['./Part_3/ABC.py', '1', 'Garrett']
Connection Established 2.6.0
calling question one
in question one
(1, 'bar', '2891 Garrett Street', '374-347-8057')
The connection with the database has been closed.
PS C:\Users\jacqu\DatabaseProject359\Database-Project>
```

QUERY 2

```
ABC.py M X
Part_3 > ABC.py > main

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47     records = cur.fetchall()
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49
50     if((len(records)) != 0):
51         for row in records:
52             print(row)
53     else:
54         print ("No matching rows returned.")
55
56
57     close_connection(conn)
58
59 def select_questionTwo(conn, schedulerSystemInput):
60     """
61     Query DigitalDisplay, Specializes, TechnicalSupport by schedulerSystem
62     :param conn: the connection object
63     :param schedulerSystemInput: schedulerSystem entered in query
64     :return:
65     """
66     cur=conn.cursor()
67     cur.execute("SELECT serialNo, DigitalDisplay.modelNo, name FROM DigitalDisplay, Specializes, TechnicalSupport WHERE schedulerSystem = %s" % schedulerSystemInput)
68     records = cur.fetchall()
69
70     if((len(records)) != 0):
71         for row in records:
72             print(row)
73     else:
74         print ("No matching rows returned.")
75
76
77     close_connection(conn)
78
79 def select_questionThree(conn, other):
80     """
81     Query DigitalDisplay, Specializes, TechnicalSupport
82     :param conn: the connection object
83     :return:
84     """
85     cur=conn.cursor()
86     cur.execute("SELECT COUNT(name) AS cnt, name AS Name FROM Salesman WHERE (empId, name) = (%s, %s)" % (other[0], other[1]))
87     counts = cur.fetchall()
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QUERY 3

Part_3 > ABC.py > main

```
75
76
77     close_connection(conn)
78
79 def select_questionThree(conn, other):
80     """
81     Query DigitalDisplay, Specializes, TechnicalSupport
82     :param conn: the connection object
83     :return:
84     """
85     cur=conn.cursor()
86     cur.execute("SELECT COUNT(name) AS cnt, name AS Name FROM Salesman WHERE (empId, na
87     counts = cur.fetchall()
88
89
90     print("Name      cnt")
91     print("-----")
92
93     if((len(counts)) != 0):
94         for row in counts:
95             if(row[0] == 1):
96                 print(row[1].ljust(10) , row[0])
97             else:
98                 cur.execute("SELECT empId, name, gender FROM Salesman WHERE name = ?",
99                 dupes = cur.fetchall()
100                 dupe_string = ""
101                 for dupe in dupes:
102                     dupe_string += "," + str(dupe[0]) + "," + dupe[1] + "," + dupe[2]
103                 print(row[1].ljust(10), row[0], dupe_string[1:])
104
105     else:
106         print ("Empty Table.")
107
108
109     close_connection(conn)
110
111
112 def select_questionFour(conn, phone):
113     """
114     Query clientId, name, phone, address
115     :param conn: phone ext '-####'
116     :return:
117     """
```

PROBLEMS TERMINAL OUTPUT DEBUG CONSOLE

powershell + v [] [] ... ^ x

```
PS C:\Users\jacqu\DatabaseProject359\Database-Project> python ./Part_3/ABC.py 3
['./Part_3/ABC.py', '3']
Connection Established 2.6.0
-----
Chanelle Piker 1
Gypsy Smith 1
Johnnie Lee 1
Johnnie Perez 2 (3,Johnnie Perez,'M'),(7,Johnnie Perez,'M')
Margery Manson 1
Willie Hubbard 1
The connection with the database has been closed.
PS C:\Users\jacqu\DatabaseProject359\Database-Project> python ./Part_3/ABC.py 4 646-908-5539
```

QUERY 4

```
ABC.py M X
Part_3 > ABC.py > main
101         for dupe in dupes:
102             dupe_string += "," + str(dupe[0]) + "," + dupe[1] + "," + dupe[2]
103             print(row[1].ljust(10), row[0], dupe_string[1:])
104
105         else:
106             print("Empty Table.")
107
108
109     close_connection(conn)
110
111
112 def select_questionFour(conn, phone):
113     """
114     Query clientId, name, phone, address
115     :param conn: phone ext '-####'
116     :return:
117     """
118
119     cur=conn.cursor()
120     cur.execute("SELECT clientId, name, phone, address FROM Client WHERE phone =?", (ph
121     records = cur.fetchall()
122
123     if((len(records)) != 0):
124         for row in records:
125             print(row)
126
127     else:
128         print("Empty Table.")
129
130     close_connection(conn)
131
132 def select_questionFive(conn, other):
133     """
134     Query empID, name, hours
135     :param conn: the connection object
136     :return:
137     """
138
139     cur=conn.cursor()
140     cur.execute("SELECT a.empID, a.name, hours FROM Administrator a JOIN AdmWorkHours b
141     records = cur.fetchall()
142
143     if((len(records)) != 0):
144         for row in records:
145             print(row)
146
147     else:
148         print("Empty Table.")
149
150     close_connection(conn)
151
152 if __name__ == '__main__':
153     main()
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QUERY 5

```
ABC.py M X
Part_3 > ABC.py > main
114     Query clientId, name, phone, address
115     :param conn: phone ext '-####'
116     :return:
117     """
118
119     cur=conn.cursor()
120     cur.execute("SELECT clientId, name, phone, address FROM Client WHERE phone =?", (ph
121     records = cur.fetchall()
122
123     if((len(records)) != 0):
124         for row in records:
125             print(row)
126
127     else:
128         print("Empty Table.")
129
130     close_connection(conn)
131
132 def select_questionFive(conn, other):
133     """
134     Query empID, name, hours
135     :param conn: the connection object
136     :return:
137     """
138
139     cur=conn.cursor()
140     cur.execute("SELECT a.empID, a.name, hours FROM Administrator a JOIN AdmWorkHours b
141     records = cur.fetchall()
142
143     if((len(records)) != 0):
144         for row in records:
145             print(row)
146
147     else:
148         print("Empty Table.")
149
150     close_connection(conn)
151
152 def select_questionSix(conn, modelNo):
153     """
154     Query name
155     :param conn: modelNo
156     :return:
157
Connection Established 2.6.0
(1, 'Caleb Anabella', '646-908-5539', '1232 W Mud River Rd')
The connection with the database has been closed.
PS C:\Users\jacqu\DatabaseProject359\Database-Project> python ./Part_3/ABC.py 5
['./Part_3/ABC.py', '5']
Connection Established 2.6.0
(5, 'Curtis Taylor', 5)
(1, 'Alex Carden ', 8)
(2, 'Alden Sanchez', 8)
(3, 'Randell Johnson', 8)
(4, 'Oakley Peterson', 8)
PS C:\Users\jacqu\DatabaseProject359\Database-Project>
```

QUERY 6

QUERY 7

```
Part_3 > ABC.py > main
161     records = cur.fetchall()
162
163     if((len(records)) != 0):
164         for row in records:
165             print(row)
166     else:
167         print("Empty Table");
168
169     close_connection(conn)
170
171
172
173 #For number Seven
174
175 def select_questionSeven(conn, other):
176
177     cur=conn.cursor()
178     cur.execute("SELECT Salesman.name, AVG(Purchases.commissionRate) AS avg_commission
179     records = cur.fetchall()
180
181     if((len(records)) != 0):
182         for row in records:
183             print(row)
184
185     else:
186         print ("Empty Table.")
187
188
189     close_connection(conn)
190
191
192 #For number eight
193
194 def select_questionEight(conn, other):
195
196     cur=conn.cursor()
197     cur.execute("SELECT 'Administrator' AS Role, COUNT(*) AS cnt FROM administrator UNI
198     records = cur.fetchall()
199
200     if((len(records)) != 0):
201         for row in records:
202             print(row)
203
204
```

PROBLEMS TERMINAL OUTPUT DEBUG CONSOLE

Connection Established 2.6.0
('Rainbow Nick',)
PS C:\Users\jacqu\DatabaseProject359\Database-Project> python ./Part_3/ABC.py 7
['./Part_3/ABC.py', '7']
Connection Established 2.6.0
('Willie Hubbard', 0.5)
('Margery Manson', 0.5)
('Johnnie Perez', 0.5)
('Gypsy Smith', 0.5)
('Chanelle Piker', 0.5)
The connection with the database has been closed.
PS C:\Users\jacqu\DatabaseProject359\Database-Project>

QUERY 8

```
191
192
193 #For number eight
194
195 def select_questionEight(conn, other):
196
197     cur=conn.cursor()
198     cur.execute("SELECT 'Administrator' AS Role, COUNT(*) AS cnt FROM administrator UNI
199     records = cur.fetchall()
200     print("Name      cnt")
201     print("-----")
202
203     if((len(records)) != 0):
204         for row in records:
205             print(row)
206
207     else:
208         print ("Empty Table.")
209
210
211     close_connection(conn)
212
213
214
215
216 def main(question_num, other):
```

PROBLEMS TERMINAL OUTPUT DEBUG CONSOLE

powershell + v [] [] ... ^ x

```
('Technicians', 5)
The connection with the database has been closed.
PS C:\Users\jacqu\DatabaseProject359\Database-Project> python ./Part_3/ABC.py 8
['./Part_3/ABC.py', '8']
Connection Established 2.6.0
Name      cnt
-----
('Administrator', 5)
('Salesmen', 7)
('Technicians', 5)
The connection with the database has been closed.
PS C:\Users\jacqu\DatabaseProject359\Database-Project> [ ]
```

Ln 200, Col 5 - Spaces: 4 - UTF-8 - CP1252 - Python 3.11.2 64-bit - Prettier [] []