

MYSQL

In [2]:

```
1 import mysql.connector as connection
2
3 try:
4     mydb = connection.connect(host="localhost", user="root", passwd="mysql",use_pure=True)
5     # check if the connection is established
6     print(mydb.is_connected())
7     mydb.close()
8 except Exception as e:
9     print(str(e))
```

True

In [5]:

```
1 import mysql.connector as connection
2
3 try:
4     mydb = connection.connect(host="localhost",user="root", passwd="mysql",use_pure=True)
5     # check if the connection is established
6
7     query = "SHOW DATABASES"
8
9     cursor = mydb.cursor() #create a cursor to execute queries
10    cursor.execute(query)
11    print(cursor.fetchall())
12
13 except Exception as e:
14    mydb.close()
15    print(str(e))
```

```
[('information_schema',), ('mysql',), ('performance_schema',), ('sakila',),
('student',), ('sys',), ('world',)]
```

In [4]:

```
1 import mysql.connector as connection
2
3 try:
4     mydb = connection.connect(host="localhost", user="root", passwd="mysql",use_pure=True)
5     # check if the connection is established
6     print(mydb.is_connected())
7
8     query = "Create database Student;"
9     cursor = mydb.cursor() #create a cursor to execute queries
10    cursor.execute(query)
11    print("Database Created!!")
12    mydb.close()
13 except Exception as e:
14    mydb.close()
15    print(str(e))
```

True

Database Created!!

In [6]:

```
1 import mysql.connector as connection
2
3 try:
4     mydb = connection.connect(host="localhost", database = 'Student',user="root", passw
5     # check if the connection is established
6     print(mydb.is_connected())
7
8     query = "CREATE TABLE StudentDetails (Studentid INT(10) AUTO_INCREMENT PRIMARY KEY,
9             LastName VARCHAR(60), RegistrationDate DATE,Class Varchar(20), Section Var
10
11     cursor = mydb.cursor() #create a cursor to execute queries
12     cursor.execute(query)
13     print("Table Created!!")
14     mydb.close()
15 except Exception as e:
16     mydb.close()
17     print(str(e))
```

True

Table Created!!

In [7]:

```
1 import mysql.connector as connection
2
3 try:
4     mydb = connection.connect(host="localhost", database = 'Student',user="root", passw
5     # check if the connection is established
6     print(mydb.is_connected())
7     query = "INSERT INTO StudentDetails VALUES ('1132','Sachin','Kumar','1997-11-11','E
8
9     cursor = mydb.cursor() #create a cursor to execute queries
10    cursor.execute(query)
11    print("Values inserted into the table!!")
12    mydb.commit() #after insertion
13    mydb.close()
14 except Exception as e:
15    mydb.close()
16    print(str(e))
```

True

Values inserted into the table!!

In [8]:

```
1 import mysql.connector as connection
2
3
4 try:
5     mydb = connection.connect(host="localhost", database = 'GlassData',user="root", pas
6     #check if the connection is established
7     print(mydb.is_connected())
8     query = "Select * from GlassData;"
9     cursor = mydb.cursor() #create a cursor to execute queries
10    cursor.execute(query)
11    for result in cursor.fetchall():
12        print(result)
13    mydb.close() #close the connection
14
15
16 except Exception as e:
17     #mydb.close()
18     print(str(e))
```

1049 (42000): Unknown database 'glassdata'

In [9]:

```
1 import mysql.connector as connection
2 import pandas as pandas
3
4 try:
5
6     mydb = connection.connect(host="localhost", database='Student', user="root", passwo
7     # check if the connection is established
8     print(mydb.is_connected())
9     query = "UPDATE studentdetails SET FirstName = 'Kumar', LastName = 'Gaurav' WHERE S
10    cursor = mydb.cursor() # create a cursor to execute queries
11    cursor.execute(query)
12    mydb.commit()
13
14    #Let's check if the value is updated in the table.
15    query = "Select * from studentdetails where Studentid=1122;"
16    cursor = mydb.cursor() # create a cursor to execute queries
17    cursor.execute(query)
18    for result in cursor.fetchall():
19        print(result)
20
21    mydb.close() # close the connection
22
23 except Exception as e:
24     #mydb.close()
25     print(str(e))
```

True

In [10]:

```
1 import mysql.connector as connection
2 import pandas as pandas
3
4 try:
5
6     mydb = connection.connect(host="localhost", database='GlassData', user="root", pass
7     # check if the connection is established
8     print(mydb.is_connected())
9     query = "Select * from GlassData;"
10    result_dataFrame = pandas.read_sql(query,mydb)
11    print(result_dataFrame)
12
13    mydb.close() # close the connection
14
15 except Exception as e:
16     #mydb.close()
17     print(str(e))
```

1049 (42000): Unknown database 'glassdata'

In [15]:

```

1 import mysql.connector as connection
2
3
4 try:
5     mydb = connection.connect(host="localhost", database = 'GlassData',user="root", pas
6     #check if the connection is established
7     print(mydb.is_connected())
8     query = "Select * from GlassData;"
9     cursor = mydb.cursor() #create a cursor to execute queries
10    cursor.execute(query)
11    for result in cursor.fetchall():
12        print(result)
13    mydb.close() #close the connection
14
15
16 except Exception as e:
17     #mydb.close()
18     print(str(e))

```

True

```

(1, 1.52101, 13.64, 4.49, 1.1, 71.78, 0.06, 8.75, 0.0, 0.0, 1)
(2, 1.51761, 13.89, 3.6, 1.36, 72.73, 0.48, 7.83, 0.0, 0.0, 1)
(3, 1.51618, 13.53, 3.55, 1.54, 72.99, 0.39, 7.78, 0.0, 0.0, 1)
(4, 1.51766, 13.21, 3.69, 1.29, 72.61, 0.57, 8.22, 0.0, 0.0, 1)
(5, 1.51742, 13.27, 3.62, 1.24, 73.08, 0.55, 8.07, 0.0, 0.0, 1)
(6, 1.51596, 12.79, 3.61, 1.62, 72.97, 0.64, 8.07, 0.0, 0.26, 1)
(7, 1.51743, 13.3, 3.6, 1.14, 73.09, 0.58, 8.17, 0.0, 0.0, 1)
(8, 1.51756, 13.15, 3.61, 1.05, 73.24, 0.57, 8.24, 0.0, 0.0, 1)
(9, 1.51918, 14.04, 3.58, 1.37, 72.08, 0.56, 8.3, 0.0, 0.0, 1)
(10, 1.51755, 13.0, 3.6, 1.36, 72.99, 0.57, 8.4, 0.0, 0.11, 1)
(11, 1.51571, 12.72, 3.46, 1.56, 73.2, 0.67, 8.09, 0.0, 0.24, 1)
(12, 1.51763, 12.8, 3.66, 1.27, 73.01, 0.6, 8.56, 0.0, 0.0, 1)
(13, 1.51589, 12.88, 3.43, 1.4, 73.28, 0.69, 8.05, 0.0, 0.24, 1)
(14, 1.51748, 12.86, 3.56, 1.27, 73.21, 0.54, 8.38, 0.0, 0.17, 1)
(15, 1.51763, 12.61, 3.59, 1.31, 73.29, 0.58, 8.5, 0.0, 0.0, 1)
(16, 1.51761, 12.81, 3.54, 1.23, 73.24, 0.58, 8.39, 0.0, 0.0, 1)
(17, 1.51784, 12.68, 3.67, 1.16, 73.11, 0.61, 8.7, 0.0, 0.0, 1)
(18, 1.52196, 14.36, 3.85, 0.89, 71.36, 0.15, 9.15, 0.0, 0.0, 1)

```

In [13]:

```
1 import mysql.connector as connection
2
3 try:
4
5     mydb = connection.connect(host="localhost", database='Student', user="root", password="root")
6     # check if the connection is established
7     print(mydb.is_connected())
8     query = "DELETE FROM studentdetails WHERE Studentid = 1122"
9     cursor = mydb.cursor() # create a cursor to execute queries
10    cursor.execute(query)
11    mydb.commit()
12
13    #let's check if the value is updated in the table.
14    query = "Select * from studentdetails where Studentid=1122;"
15    cursor = mydb.cursor() # create a cursor to execute queries
16    cursor.execute(query)
17    for result in cursor.fetchall():
18        print(result)
19
20    mydb.close() # close the connection
21
22 except Exception as e:
23     #mydb.close()
24     print(str(e))
```

True

In [14]:

```

1 import mysql.connector as connection
2 import pandas as pandas
3 import csv
4
5 try:
6     mydb = connection.connect(host="localhost", user="root", passwd="mysql",use_pure=True)
7     #check if the connection is established
8     print(mydb.is_connected())
9     #create a new database
10    query = "Create database GlassData;"
11    cursor = mydb.cursor() #create a cursor to execute queries
12    cursor.execute(query)
13    print("Database Created!!")
14    mydb.close() #close the connection
15
16    #Establish a new connection to the database created above
17    mydb = connection.connect(host="localhost", database = 'GlassData',user="root", passwd="mysql")
18
19    #create a new table to store glass data
20    query = "CREATE TABLE IF NOT EXISTS GlassData (Index_Number INT(10),RI float(10,5),
21            " Si float(10,5), K float(10,5), Ca float(10,5), Ba float(10,5), Fe float(10,5))"
22    cursor = mydb.cursor() # create a cursor to execute queries
23    cursor.execute(query)
24    print("Table Created!!")
25
26    #read from the file
27    with open('glass.data', "r") as f:
28        next(f)
29        glass_data = csv.reader(f, delimiter="\n")
30        for line in enumerate(glass_data):
31            for list_ in (line[1]):
32                cursor.execute('INSERT INTO GlassData values ({values})'.format(values=list_))
33    print("Values inserted!!")
34    mydb.commit()
35    cursor.close()
36    mydb.close()
37
38 except Exception as e:
39     #mydb.close()
40     print(str(e))

```

True
Database Created!!
Table Created!!
Values inserted!!

In []:

1