1. Set the variable test1 to the string 'This is a test of the emergency text system,' and save test1 to a file named test.txt.

F=open(“test.txt”,”w”)

F.write(“Test1=’This is a test of the emergency text system,’”)

F.close()

1. Read the contents of the file test.txt into the variable test2. Is there a difference between test 1 and test 2?

Test2=open(“test.txt”,’wb’)

Test2.readline()

Test2.close()

1. Create a CSV file called books.csv by using these lines:

title,author,year

The Weirdstone of Brisingamen,Alan Garner,1960

Perdido Street Station,China Miéville,2000

Thud!,Terry Pratchett,2005

The Spellman Files,Lisa Lutz,2007

Small Gods,Terry Pratchett,1992

Books={‘title’:[‘The Weirdstone of Brisingamen’, ’Perdido Street Station’, ‘Thud!’, ‘The Spellman Files’, ‘Small Gods’],’author’:[‘Alan Garner’, ’China Mieville’, ’Terry Pratchett’, ’Lisa Lutz’, ’Terry Pratechett’], ‘year’:[1960,2000,2005,2007,1992]}

Import pandas as pd

pd.to\_csv(Books,”books.csv”)

1. Use the sqlite3 module to create a SQLite database called books.db, and a table called books with these fields: title (text), author (text), and year (integer).

import sqlite3

import sys

try:

conn=sqlite3.connect(“books.db”)

cur=conn.cursor()

cur.execute(‘DROP TABLE IF EXISTS books‘)

cur.execute(‘CREATE TABLE books(title TEXT, author TEXT, year INT)’)

except sqlite3.Error as e:

print(f”Error {e.args[0]}”)

sys.exit(1)

finally:

if con:

con.close()

1. Read books.csv and insert its data into the book table.

Import pandas as pd

Import sqlite3

Boks=pd.read\_csv(“books.csv”)

print(Boks)

conn=sqlite3.connect(“books.db”)

cur=conn.cursor()

cur.execute("DROP TABLE IF EXISTS books")

cur.execute("CREATE TABLE books(title TEXT, author TEXT, year INT)")

cur.executemany("INSERT INTO cars VALUES(?, ?, ?)", Boks)

conn.close()

1. Select and print the title column from the book table in alphabetical order.

Import sqlite3

conn=sqlite3.connect(“books.db”)

cur=conn.cursor()

cur.execute("SELECT title FROM books ORDER BY title ASC")

conn.close()

1. From the book table, select and print all columns in the order of publication.

Import sqlite3

conn=sqlite3.connect(“books.db”)

cur=conn.cursor()

cur.execute("SELECT \* FROM books ORDER BY year ASC")

conn.close()

1. Use the sqlalchemy module to connect to the sqlite3 database books.db that you just made in exercise 6.

Import pandas as pd

Import sqlalchemy as sq

Db=sq.create\_engine(‘sqlite:////home/risha/books.db’)

pd.read\_sql(“ select \* from books”,Db)

1. Install the Redis server and the Python redis library (pip install redis) on your computer. Create a Redis hash called test with the fields count (1) and name ('Fester Bestertester'). Print all the fields for test

Import redis as rd

Test=rd.StrictRedis(host=’localhost’, port=6397, db=books.db)

Test.hset(“test”,{‘count’ : 1, ‘name’ : ’Fester Bertertester’})

print(Test.hkeys(“test”))

1. Increment the count field of test and print it.

Import redis as rd

rd.hincrby(test, count, 1)