1. Set the variable test1 to the string &#39;This is a test of the emergency text system,&#39; and save test1 to a

file named test.txt.

A:

test1 ='This is a test of the emergency text system'

f=open("test.txt",'w')

f.write(test1)

f.close()

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

and test 2?

A:

with open('test.txt', 'rt') as infile:

test2 = infile.read()

print(len(test2))

test1==test2

3. 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

A:

text = '''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

'''

with open('books.csv', 'wt') as outfile:

outfile.write(text)

4. 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).

A:

import sqlite3

db = sqlite3.connect('books.db')

curs = db.cursor()

curs.execute('''create table book (title text, author text, year int)''')

db.commit()

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

A:

import csv

import sqlite3

ins\_str = 'insert into book values(?, ?, ?)'

with open('books.csv', 'rt') as infile:

books = csv.DictReader(infile)

for book in books:

curs.execute(ins\_str, (book['title'], book['author'], book['year']))

db.commit()

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

A:

sql = 'select title from book order by title asc'

for row in db.execute(sql):

print(row)

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

A:

for row in db.execute('select \* from book order by year'):

print(row)

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

exercise 6.

A:

import sqlalchemy

conn = sqlalchemy.create\_engine('sqlite:///books.db')

sql = 'select title from book order by title asc'

rows = conn.execute(sql)

for row in rows:

print(row)

9. 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 (&#39;Fester Bestertester&#39;). Print all the fields for

test.

A:

import redis

conn = redis.Redis()

conn.delete('test')

conn.hmset('test', {'count': 1, 'name': 'Fester Bestertester'})

conn.hgetall('test')

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

A:

conn.hincrby('test', 'count', 3)

conn.hget('test', 'count')