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 .

Ans :test1 = 'This is a test of the. emergency text system,'

file = open('test.txt','w')

file.write(test1)

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2)read the contents of the file test.txt into the variable test2.is there a difference between test 1 and test 2. ?

Ans : file2 = open('test.txt','r')

test2 = file2.readline()

test2

O/P 'This is a test of the emergency text system,'

if test1==test2:

print('Both are same')

Both are same

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,liza lutz 2007.

Small gods ,terry pratchett,1992.

Ans : import csv

rows =[ ['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','w',newline='') as file:

writer = csv.writer(file)

writer.writerows(rows)

4)use the sqlite3 module to create a SQLite database called books.db and a table called books with this field :title(text ),author (text),and year (integer).

Ans :,import sqlite3

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

c = conn.cursor()

c.execute('create table books(title varchar(20),author varchar(20), year int)')

conn.commit()

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

Ans : import pandas as pd

read\_books = pd.read\_csv('books.csv',encoding='unicode\_escape')

read\_books.to\_sql('books', conn,)

6)select & print the title column from the book table in alphabetical order.

Ans : c.execute('select title from books order by title asc')

print(c.fetchall())

[('Perdido Street Station',), ('Small Gods',), ('The Spellman Files',), ('The Weirdstone of Brisingamen',), ('Thud!',)]

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

Ans : c.execute('select title, author,year from books order by year')

df = pd.DataFrame(c.fetchall(), columns=['title','author','year'])

df

O/p.

| Title | Author | Year |
| --- | --- | --- |
| The weirdstone of brisingamen | Alan garner | 1960 |
| Small gods | Terry pratchett | 1992 |
| Perdido street station | China miÃ©ville | 2000 |
| Thud! | Terry pratchett | 2005 |

8)use the sqlalchemy module to connect to the sqlite3 database books.db that you just made in exercise 6.

Ans : import sqlalchemy

engine = sqlalchemy.create\_engine("sqlite:///books.db")

rows = engine.execute('select \* from books')

for i in rows:

print(i)

O/p ('The Weirdstone of Brisingamen', 'Alan Garner', 1960)

('Perdido Street Station', 'China MiÃ©ville', 2000)

('Thud!', 'Terry Pratchett', 2005)

('The Spellman Files', 'Lisa Lutz', 2007)

('Small Gods', 'Terry Pratchett', 1992)

9)install the redis server and python redis library (pip install redis )on your computer.create a redis hash called test with the fields count (1) name ('fester bestertester')print all the fields for test.

Ans : !pip install redis

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.

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