



Introduction to Python II Exercises 04 (sample program answers)

Remember that you can come out with a different way to solve the exercises

At the beginning while you are getting acquainted with programming and Python as a language your objective is to produce a suitable RESULT. As you get more experience, you will be able to apply your python knowledge to write elegant code. But for the time being focus on the results.

1

```
#python II Exercise #4

import sqlite3

#Connect to DB and create cursor

conn = sqlite3.connect('mysqldb01.db')
cur = conn.cursor()

#Get records from user and save them to the db

records = []

for i in range(3):
    #get fields from the user

    bookid = input("Enter Book Id: ")
    booktitle = input("Enter Book Title: ")
    bookcateg = input("Enter Book Category: ")
    bookprice = float(input("Enter Book price: "))

    #create a tuple with the fieds and add it to the list

    record = (bookid, booktitle, bookcateg, bookprice)
    records.append(record)

# writing records to the database

sql = '''INSERT INTO books (bookid, booktitle, bookcateg, bookprice)
        VALUES (?, ?, ?, ?)'''

cur.executemany(sql, records)
conn.commit()

#continue in next page
```




```
# Reading records

sql = 'SELECT * from books'
cur.execute(sql)

record = cur.fetchone()

while record != None:
    bookid = record[0]
    booktitle = record[1]
    bookcateg = record[2]
    bookprice = record[3]
    print('Book Id: {}, Title: {}, Category: {}, Price: {}'.format(bookid, booktitle, bookcateg, bookprice))
    record = cur.fetchone()

conn.close()
```



2

```
import sqlite3
import json

#Connect to DB and create cursor
conn = sqlite3.connect('mysqlldb01.db')
cur = conn.cursor()

#Get records from user and save them to the db

datadict = {}
datalist = []

# Get all records query

sql = 'SELECT * from books'
cur.execute(sql)

#Continues in next page
```



```
# read a record, build the dictionnay and add it to a list
record = cur.fetchone()
while record != None:
    bookid = record[0]
    booktitle = record[1]
    bookcateg = record[2]
    bookprice = record[3]

    datadict['bookid'] = bookid
    datadict['booktitle'] = booktitle
    datadict['bookcateg'] = bookcateg
    datadict['bookprice'] = bookprice

    datalist.append(datadict)
    record = cur.fetchone()

with open('books_01.json', 'w') as outfile:
    json.dump(datalist, outfile, indent=4, sort_keys=False,
    separators=(',', ' :'))
```

