**PRACTICALS TERM 2 – SQL INTERFACING WITH PYTHON**

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| **QUESTION**  **NO.** | **OBJECTIVE & SOLUTIONS** |
| **3** | Write a program to connect Python with MySQL using database connectivity  and perform the following operations on data in database BookShop: Fetch,  Update and delete the data.  A) CREATE A TABLE  B) INSERT THE DATA  C) UPDATE THE RECORD  D) DELETE THE DATA |
| **SOURCE**  **CODE:** | import mysql.connector  mydb=mysql.connector.connect(  host='localhost',  user='root',  password='1125899839733759',  database='bookshop')  cursor=mydb.cursor()  #creating the table  cursor.execute('create table book(bookno int, bookname varchar(20), price float, author varchar(20),publisher varchar(20))')  while True:  c=int(input('1. Insert data\n2. Update a record.\n3. Delete a record\n4. Exit\nEnter your choice (1,2,3,4) : '))  print()  if c==1:  l=()  l+=(int(input('Enter the book number : '))),  a=input('Enter the name of the book : ')  a='"'+a+'"'  l+=(a),  l+=(eval(input('Enter the price : '))),  a=input('Enter the name of the author : ')  a='"'+a+'"'  l+=(a),  a=input('Enter the publisher : ')  a='"'+a+'"'  l+=(a),  cursor.execute('insert into book values(%s,%s,%s,%s,%s)'%(l))  mydb.commit()  print('\nRecord inserted.')  elif c==2:  l=[]  n=int(input('Enter the book number of the record to be updated : '))  cursor.execute('select bookno from book')  for i in cursor:  for j in i:  l.append(j)  if n in l:  a=int(input('1. Bookname\n2. Price\n3. Author\n4. Publisher\nEnter the value to be updated : '))  if a==1:  nn=int(input('Enter the new bookname : '))  cursor.execute('update book set bookname=%s where bookno=%s'%(nn,n))  mydb.commit()  elif a==2:  np=eval(input('Enter the new price of the book : '))  cursor.execute('update book set price=%s where bookno=%s'%(np,n))  mydb.commit()  elif a==3:  na=input('Enter the author : ')  cursor.execute('update book set author=%s where bookno=%s'%(na,n))  mydb.commit()  elif a==4:  np=int(input('Enter the publisher : '))  cursor.execute('update book set publisher=%s where bookno=%s'%(np,n))  mydb.commit()  else:  print('Invalid entry.')  break  else:  print('Record not found.')  elif c==3:  l=[]  n=int(input('Enter the book number of the record to be deleted : '))  cursor.execute('select bookno from book')  for i in cursor:  for j in i:  l.append(j)  if n in l:  cursor.execute('delete from book where bookno=%s'%(n))  mydb.commit()  print('Record deleted.')  else:  print('Record not found.')  elif c==4:  break  else:  print('Invalid entry.')  print() |

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| **OUTPUT:** | Output in python:  1. Insert data  2. Update a record.  3. Delete a record  4. Exit  Enter your choice (1,2,3,4) : 1  Enter the book number : 1  Enter the name of the book : a  Enter the price : 2  Enter the name of the author : a  Enter the publisher : a  Record inserted.  1. Insert data  2. Update a record.  3. Delete a record  4. Exit  Enter your choice (1,2,3,4) : 1  Enter the book number : 2  Enter the name of the book : b  Enter the price : 4  Enter the name of the author : b  Enter the publisher : b  Record inserted.  1. Insert data  2. Update a record.  3. Delete a record  4. Exit  Enter your choice (1,2,3,4) : 2  Enter the book number of the record to be updated : 1  1. Bookname  2. Price  3. Author  4. Publisher  Enter the value to be updated : 2  Enter the new price of the book : 1  1. Insert data  2. Update a record.  3. Delete a record  4. Exit  Enter your choice (1,2,3,4) : 3  Enter the book number of the record to be deleted : 2  Record deleted.  1. Insert data  2. Update a record.  3. Delete a record  4. Exit  Enter your choice (1,2,3,4) : 4  >>>  Effects on database bookshop:  Table created:    2 Records inserted :    1st record updated :    2nd record deleted : |