#19

import mysql.connector as db

import csv

mycon=db.connect(host="localhost",user="root",password="",database="test")

print("\t\t\t\tPython connectivity program-2")

print("\t\t\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

if mycon.is\_connected():

print("connected")

c=mycon.cursor()

st="select \* from student"

c.execute(st)

data=c.fetchall()

with open("stud.csv","w",newline="") as f:

csvw=csv.writer(f)

csvw.writerows(data)

ans="y"

while ans.lower()=="y":

print()

print("1.Display contents from the CSV file showing

values in each record separated by a comma")

print("2.Read from CSV file and display the name of the

top scorer")

print("3.Exit")

print()

ch=int(input("Enter your choice:"))

if ch==1:

with open("stud.csv","r") as f:

csvw=csv.reader(f)

print("The contents of the file separated by

comma are:")

for i in csvw:

print(i[0],i[1],i[2],i[3],i[4],sep=",")

elif ch==2:

with open("stud.csv","r") as f:

csvw=csv.reader(f)

print("The Top scorers are:")

m=0

for i in csvw:

if m<float(i[2]):

m=float(i[2])

nam=i[1]

print(nam,":",m)

elif ch==3:

break

print()

ans=input("Do you want to continue(y/n)")

mycon.close()

19#ends

20#starts

import mysql.connector as db

mycon=db.connect(host="localhost",user="root",password="",database="test")

print("\t\t\t\tPython connectivity program-3")

print("\t\t\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

if mycon.is\_connected():

print("connected")

c=mycon.cursor()

dp="drop table if exists employee"

c.execute(dp)

dp1="drop table if exists department"

c.execute(dp1)

emp="create table employee(Empno int not null primary

key,Name varchar(25),Desig varchar(25),Deptno

int,salary float)"

c.execute(emp)

dept="create table department(Deptno int not null

references employee(deptno),Dname char(20),location

char(20))"

c.execute(dept)

n=int(input("Enter no of records:"))

for i in range(n):

empid=int(input("Enter Empno:"))

name=input("Enter name:")

desig=input("Enter designation:")

deptno=int(input("Enter unique department number:"))

sal=float(input("Enter salary:"))

dname=input("Enter department name:")

loc=input("Enter location:")

st1="insert into employee

values({},'{}','{}',{},{})".format(empid,name,

desig,deptno,sal)

c.execute(st1)

mycon.commit()

st2="insert into department

values({},'{}','{}')".format(deptno,dname,loc)

c.execute(st2)

print("record inserted")

mycon.commit()

print()

ans="y"

while ans.lower()=="y":

print()

print("1.Display details of all managers like

Empno,Name,Salary,Dname,Location")

print("2.Display Name,deptno,location of all who are

earning more than 50000 in alphabetical order")

print("3.Exit")

print()

ch=int(input("Enter your choice:"))

if ch==1:

query1="select e.empno,e.name,e.salary,

d.dname,d.location

from employee e,department d where

e.deptno=d.deptno and e.desig='manager'"

c.execute(query1)

data=c.fetchall()

print("Manager Details")

if data:

for i in data:

print("Employee Number",i[0])

print("Name",i[1])

print("Salary",i[2])

print("Department",i[3])

print("Location",i[4])

print()

else:

print("No manager in the database")

elif ch==2:

query2="select e.name,e.deptno,d.location from

employee e,department d where salary>50000

and e.deptno=d.deptno order by e.name"

c.execute(query2)

data=c.fetchall()

print("Details of employees earning more than 50000 in alphabetical order")

if data:

for i in data:

print("Name:",i[0])

print("Department Number:",i[1])

print("Location:",i[2])

print()

else:

print("No one earning more than 50000")

ans=input("Do you want to continue(y/n)")

mycon.close()

20end

18#start

import mysql.connector as db

mycon=db.connect(host="localhost",user="root",password="",database="test")

print("\t\t\t\tPython connectivity program-1")

print("\t\t\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

if mycon.is\_connected():

print("connected")

c=mycon.cursor()

dp="drop table if exists student"

c.execute(dp)

st="create table student(rollno int not null primary key,name varchar(25),Total float,course varchar(25) check(course in('cs','bio','eg')),dob date)"

c.execute(st)

n=int(input("Enter no of records(atleast 2) from same course:"))

for i in range(n):

r=int(input("Enter rollno:"))

name=input("Enter name:")

total=int(input("Enter total:"))

course=input("Enter course:")

dob=input("Enter date-of-birth(yyyy-mm-dd):")

st1="insert into student

values({},'{}',{},'{}','{}')".format(r,name,total,course,dob)

c.execute(st1)

print("record inserted")

mycon.commit()

ans="y"

while ans=="y":

print()

print("1.FInding maximum total marks,minimum total

marks,number of students in each course where there

are atleast 2 students")

print("2.Display details of students who are born in the

month of May 2003 who have scored total between 100 to

200")

print("3.Sort the student list in descending order of total")

print("4.Increase total marks of cs student by 5% for those

whose total is less than 180")

print("5.Exit")

ch=int(input("Enter your choice:"))

if ch==1:

query1="select max(total),min(total) ,count(\*),course

from student group by course having count(rollno)>=2"

c.execute(query1)

data=c.fetchall()

print("Students with maximum,minimum total coursewise")

if data:

for i in data:

print("Maximum marks in:",i[3],"is",i[0])

print("Minimum marks in:",i[3],"is",i[1])

else:

print("No such record exists")

elif ch==2:

query2="select \* from student where dob like '2003-05%'

and total between 100 and 200"

c.execute(query2)

data=c.fetchall()

print("Students born in the month of May")

if data:

for i in data:

print("RollNo:",i[0])

print("Name:",i[1])

print("Total:",i[2])

print("Course:",i[3])

print("Date-of-birth:",i[4])

print()

else:

print("No such record exists")

elif ch==3:

query3="select \* from student order by total desc"

c.execute(query3)

data=c.fetchall()

print("Students list in descending order")

if data:

for i in data:

print("RollNo:",i[0])

print("Name:",i[1])

print("Total:",i[2])

print("Course:",i[3])

print("Date-of-birth:",i[4])

print()

else:

print("No such record exists")

elif ch==4:

query4="select \* from student"

c.execute(query4)

data1=c.fetchall()

found=False

if data1:

for i in data1:

if i[2]<180:

query5="update student set

total=total\*(5/100)+total where total<180"

c.execute(query5)

mycon.commit()

query6="Select \* from student"

c.execute(query6)

data2=c.fetchall()

found=True

for i in data2:

print("updated records")

print("RollNo:",i[0])

print("Name:",i[1])

print("Total:",i[2])

print("Course:",i[3])

print("Date-of-birth:",i[4])

print()

if found==False:

print("No such record exists")

else:

print("No such record exists")

ans=input("Do you want to continue(y/n)")

mycon.close()

#endof18

17start

# Practical 17

print('\t\t\t Stack Using Country and Capital')

print('\t\t\t \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*')

print()

def peek(stk):

n=len(stk)

top=n-1

if top!=-1:

print()

print('Top =',top)

print('Top element is:',stk[top])

print()

else:

print()

print('Top = None')

print('Top element not defined')

print()

def display(stk):

n=len(stk)

top=n-1

if top!=-1:

print()

print('Top =',top)

print('Stack is:')

for i in range(top,-1,-1):

print(stk[i])

print()

else:

print()

print('Top = None')

print('Stack empty')

print()

def push(stk,e):

stk.append(e)

def pop(stk):

if stk!=[]:

a=stk.pop()

print('Popped Element is',a)

display(stk)

else:

display(stk)

print('Empty stack cannot be popped')

print()

acc='yes'

while True:

while acc=='yes':

stack=[]

n=int(input('Enter number of elements: '))

for i in range(n):

a=input('Enter country name: ')

b=input('Enter capital: ')

print()

l=[a,b]

stack.append(l)

acc='no'

print('Original Stack:')

display(stack)

print('Choose one of the following:')

print('1)Push\n2)Pop\n3)Display Stack\n4)Peek\n5)Exit')

ch=int(input('Enter your choice: '))

if ch==1:

a=input('Enter country to be added: ')

b=input('Enter capital to be added: ')

x=[a,b]

push(stack,x)

display(stack)

elif ch==2:

pop(stack)

elif ch==3:

display(stack)

elif ch==4:

peek(stack)

elif ch==5:

acc=input('Do you want to continue with new stack?(yes/no):

')

if acc=='yes':

continue

else:

break

else:

print('Choice is not defined')

continue

continue

print('\t\t\t END OF PROGRAM')

#16 start 17 ends

def push(n):

stack.append(n)

def pop():

if stack==[]:

print("STACK EMPTY")

else:

print("element removed:",stack.pop())

def display\_stk():

top=len(stack)

print("Stack details")

for i in range(top-1,-1,-1):

print(stack[i])

def peek():

top=len(stack)

print("The top element of the stack is:",stack[top-1])

print("\t\t\t\tSTACK OPERATIONS-1")

print("\t\t\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

ch="yes"

while ch=="yes":

n=int(input("Enter no of elements in the stack:"))

stack=[]

for i in range(n):

x=int(input("Enter element:"))

push(x)

print("\tMENU")

print("\t\*\*\*\*")

print("1.Push\n2.Pop\n3.Display\n4.Peek\n5.Exit")

ch\_m="0"

while ch\_m!="5":

ch\_m=input("\nEnter an option(1/2/3/4/5):")

if ch\_m=="1":

x1=int(input("Enter integer to be pushed:"))

push(x1)

display\_stk()

elif ch\_m=="2":

pop()

elif ch\_m=="3":

display\_stk()

elif ch\_m=="4":

peek()

elif ch\_m=="5":

ch=input("Do you want to continue with a new stack(yes/no):")

if ch=="yes":

continue

elif ch=="no":

break