'''18. PYTHON MYSQL INTERFACE'''

print("OUTPUT")

import mysql.connector as mc

cn=mc.connect(host='localhost',password='MySQL@12345',username='root')

cr=cn.cursor()

cr.execute('Create database if not exists record')

cr.execute('Use record')

cr.execute("Create table if not exists STUDENT(ROLL integer Primary Key,\

NAME varchar(30), TOTAL integer, COURSE varchar(20) CHECK(COURSE in\

('CS', 'BIOLOGY', 'COMMERCE', 'EG')), DOB DATE)")

cr.execute('Select \* from student')

res=cr.fetchall()

if cr.rowcount==0:

cr.execute("Insert into student values(1,'Ram',460,'CS','2005-09-09')")

cr.execute("Insert into student values(2,'Manoj',380,'BIOLOGY','2005-06-29')")

cr.execute("Insert into student values(3,'Seetha',477,'COMMERCE','2005-07-12')")

cr.execute("Insert into student values(4,'Hari',443,'CS','2005-05-10')")

cr.execute("Insert into student values(5,'Sriman',397,'EG','2005-05-20')")

cn.commit()

cr.execute('Select \* from student')

res=cr.fetchall()

no,marks={},[]

for i in range(len(res)):

co=res[i][3]

if co in no:

no[co]=no[co]+1

else:

no[co]=1

marks.append(res[i][2])

print('Maximum total marks',max(marks))

print('Minimum total marks',min(marks))

print('Number of students in courses with atleast 2 students')

for i in no:

if no[i]>=2:

print(i,':',no[i])

cr.execute("select \* from student where total between 100 and 200 and dob like '2003-05-\_\_'")

res1=cr.fetchall()

print("details of students born in the month of may 2003 who have scored total between 100 to 200")

for i in res1:

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

cr.execute("select \* from student order by total desc")

res2=cr.fetchall()

print('Student list in the descending order of total')

for i in res2:

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

print('Updating the table so that marks of CS students increased by 5% where marks less than 180')

cr.execute('Update student set total=1.05\*total where total<180')

cn.commit()

cr.execute('Select \* from student')

res=cr.fetchall()

print('Updated table')

for i in res:

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

'''OUTPUT

Maximum total marks 477

Minimum total marks 187

Number of students in courses with atleast 2 students

CS : 2

details of students born in the month of may 2003 who have scored total between 100 to 200

4 Hari 187 CS 2003-05-15

Student list in the descending order of total

3 Seetha 477 COMMERCE 2005-07-12

1 Ram 460 CS 2005-09-09

5 Sriman 397 EG 2005-05-20

2 Manoj 380 BIOLOGY 2005-06-29

4 Hari 187 CS 2003-05-15

Updating the table so that marks of CS students increased by 5% where marks less than 180

Updated table

1 Ram 460 CS 2005-09-09

2 Manoj 380 BIOLOGY 2005-06-29

3 Seetha 477 COMMERCE 2005-07-12

4 Hari 187 CS 2003-05-15

5 Sriman 397 EG 2005-05-20

'''

Student

