# Python Project

# Program to manage medical shop using SQL, File

print("-----Medical Shop Management System------\n---------USAVN Medical Shop---------\n")

#-------------------------------------Imported Required Modules--------------------------------------------#

import time

from datetime import \*

import csv

import os

import mysql.connector as sqltor # Connecting to Database

#-----------------------------------------Database Connection--------------------------------------------------#

mycon = sqltor.connect(host = '127.0.0.1', user = 'root', passwd = 'root', database = 'CS2020\_21') # Name of database is CS2020\_21

cursor = mycon.cursor() # Creating Cursor

cursor.execute("CREATE TABLE IF NOT EXISTS Medical\_Shop(Code INT PRIMARY KEY, Name\_Of\_Med VARCHAR(40), Name\_Of\_Manu VARCHAR(40), Batch\_No VARCHAR(15), Manu\_Date Date, Exp\_Date Date, Quantity INT(4), Price\_Per10 FLOAT(5,2))")

cursor.execute("CREATE TABLE IF NOT EXISTS Bill(Billno INT(5) PRIMARY KEY,Patient\_Name VARCHAR(40),Date Date)")

#--------------------------Fetching Current date and time from database--------------------------------#

cursor.execute("select NOW()") # getting current date with the help of my sql database

t = cursor.fetchone()

for row in t :

Time = row

#print("Time :", Time)

cursor.execute("select CURDATE()") # getting current date with the help of my sql database

d = cursor.fetchone()

for row in d :

Date = row

print("Date :", Date)

'''

We can also use

print(date.today())

'''

#----------function to reduce quantity of stock whenever a medicine is purchased---------------#

def reduce():

cursor = mycon.cursor() # creating cursor object

quant = stockquant - quan

queryup = 'update medical\_shop set Quantity = {} where Code = {}'.format(quant, code) # Updating the quantity

cursor.execute(queryup)

mycon.commit()

#---------------------------------------------Main Code------------------------------------------------------------#

#-------------------------------------------------main menu--------------------------------------------------#

answer1 = 'y'

while answer1.lower() == 'y' :

print("\n---------------------------------------------------------------------------------")

print("1. Update\View Stock On Database. \n2. Print Invoice/Bill for a Purchase.(Create a file) \n3. Exit. ") # Choice

ch = int(input("What do you want to do ? (1/2/3) : "))

#---------------------------------Adding Medicine To Database----------------------------------------------#

if ch == 1 :

if mycon.is\_connected():

print('Successfully Connected to MySQL Databases \n')

print("--------------------------------------------------")

cursor = mycon.cursor() # creating cursor object

print("-----Medicine Database------\n\n")

answer = 'y'

while answer.lower() == 'y' :

print("1. Add Medicine \n2. Remove Medicine \n3. Update Medicine Information \n4. List Of Medicine \n5. Main Menu")

ch1 = int(input("What do you want to do ? (1/2/3/4/5) : "))

if ch1 == 1 : # Adding Medicine to stock

ans = 'y'

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

print()

print("------Adding Medicine to Stock------\n")

code = int(input("Enter Code : "))

queryup = 'select \* from medical\_shop where Code = {}'.format(code)

cursor.execute(queryup)

result = cursor.fetchall()

if cursor.rowcount == 0 : # Checking for duplicate entry

nmed = input("Enter Name of Medicine : ")

nmanu = input("Enter Name of Manufacturer : ")

batch = input("Enter Batch No. : ")

mandate = input("Enter Date of Manufacturing (YYYY-MM-DD) : ")

expdate = input("Enter Date of Expiry (YYYY-MM-DD) : ")

a = date.fromisoformat(mandate)

#print(a)

b = date.fromisoformat(expdate)

#print(b)

if a < b :

pass

else:

print('Invalid Input ! \nDate Expiry Date shoud be after Manufacturing date ')

break

quan = int(input("Enter Quantity : "))

price = float(input("Enter Price Per 10 Tablets / 10 units : "))

query = 'insert into medical\_shop values({}, "{}", "{}", "{}", "{}", "{}", {}, {})'.format(code, nmed, nmanu, batch, mandate, expdate, quan, price)

cursor.execute(query)

mycon.commit()

print('Data Saved Successfully')

ans = input('Want to add more ?(y/n): ')

else:

print('%10s'%'Code', '%20s'%'Name of Medicine', '%25s'%'Name of Manufacturer', '%15s'%'Batch No.', '%25s'%'Date of Manufacturer', '%15s'%'Date of Expiry', '%20s'%'Quantity', '%18s'%'Price')

for row in result:

print('%10s'%row[0], '%20s'%row[1], '%25s'%row[2], '%13s'%row[3], '%18s'%row[4], '%20s'%row[5], '%20s'%row[6], '%21s'%row[7])

print("Medicine with code", code, "Already Present !!!\n")

break

#-----------------------------------Deleting Medicine from Database---------------------------------------#

elif ch1 == 2 :

ans = 'y'

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

print("------Deleting Medicine from Stock------\n")

nmed = input("Enter name of medicine to be Deleted: ")

query = 'select \* from medical\_shop where Name\_of\_Med = "{}"'.format(nmed)

cursor.execute(query)

result = cursor.fetchall()

if cursor.rowcount == 0 :

tim.sleep(0.5)

print("Sorry! medicine with ", nmed, "not found")

else:

print('%10s'%'Code', '%20s'%'Name of Medicine', '%25s'%'Name of Manufacturer', '%15s'%'Batch No.', '%25s'%'Date of Manufacturer', '%15s'%'Date of Expiry', '%20s'%'Quantity', '%18s'%'Price')

for row in result:

print('%10s'%row[0], '%20s'%row[1], '%25s'%row[2], '%13s'%row[3], '%18s'%row[4], '%20s'%row[5], '%20s'%row[6], '%21s'%row[7])

code = row[0]

su = input("\n\nWant to delete Sure(y/n): ")

if su.lower() == 'y':

queryde = 'delete from medical\_shop where code = {}'.format(code)

cursor.execute(queryde)

mycon.commit()

print('Record Deleted Successfully')

ans = input('Want to delete more ?(y/n): ')

#-----------------------Updating Medicine of previously entered Database-----------------------------#

elif ch1 == 3 : # Updating Medicine Information

print("------Updating Info of Medicine of Stock------\n")

ans = 'y'

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

nmed = input("Enter name of medicine to be updated: ")

queryup = 'select \* from medical\_shop where Name\_of\_Med = "{}"'.format(nmed)

cursor.execute(queryup)

result = cursor.fetchall()

if cursor.rowcount == 0 :

print("Sorry! medicine ", nmed, "not found\n")

else:

print('%10s'%'Code', '%20s'%'Name of Medicine', '%25s'%'Name of Manufacturer', '%15s'%'Batch No.', '%25s'%'Date of Manufacturer', '%15s'%'Date of Expiry', '%20s'%'Quantity', '%18s'%'Price')

for row in result:

code = row[0]

print('%10s'%row[0], '%20s'%row[1], '%25s'%row[2], '%13s'%row[3], '%18s'%row[4], '%20s'%row[5], '%20s'%row[6], '%21s'%row[7])

choice = input("Sure to Update(y/n) : ")

if choice.lower() == 'y':

print("---You can update only Batch No., Date of manufacturing and expiry, Quantity and Price---")

bno = input("Enter new batch No. (leave blank if you don't want to change it): ")

if bno == '':

bno = row[3]

Dman = input("Enter new Date of Manufacturing (leave blank if you don't want to change it): ")

if Dman == '':

Dman = row[4]

Dexp = input("Enter new Date of Expiry (leave blank if you don't want to change it): ")

if Dexp == '':

Dexp = row[5]

qua = input("Enter new Quantity(leave blank if you don'twant to change it): ")

if qua == '':

qua0 = row[6]

qua = int(qua0)

pri = input("Enter new Price (leave blank if you don't want to change it): ")

if pri == '':

pri0 = row[7]

pri = int(pri0)

queryup = 'update medical\_shop set Batch\_No = "{}", Manu\_Date = "{}", Exp\_Date = "{}", Quantity = {}, Price\_Per10 = {} where code = {}'.format(bno, Dman, Dexp, qua, pri, code)

cursor.execute(queryup)

mycon.commit()

print("Record updated succesfully\n")

ans = input('Want to update more ?(y/n): ')

#---------------------------Getting Medicine(List) Details from Database--------------------------------#

elif ch1 == 4 :

print("------ Medicines in Stock------\n")

query = 'select \* from medical\_shop'

cursor.execute(query)

result = cursor.fetchall()

print('%10s'%'Code', '%20s'%'Name of Medicine', '%25s'%'Name of Manufacturer', '%15s'%'Batch No.', '%25s'%'Date of Manufacturer', '%15s'%'Date of Expiry', '%20s'%'Quantity', '%18s'%'Price')

for row in result:

print('%10s'%row[0], '%20s'%row[1], '%25s'%row[2], '%13s'%row[3], '%18s'%row[4], '%20s'%row[5], '%20s'%row[6], '%21s'%row[7])

#------------------------------If User want to go to main menu---------------------------------------------#

elif ch1 == 5 :

break

#------------------------------------In case invalid input is given----------------------------------------------#

else :

print("Invalid Input ! ")

#------------------------Shows option to choose menu and sub menu-----------------------------------#

print("------------------------------------------------------------\n")

answer = input("For Database Menu Press y and Press Enter(return) for Main Menu : ")

#-----------------------------------------------Code To Print Invoice--------------------------------------------#

elif ch == 2 :

print("Time :", Time)

#------------------------------------Getting Bill no. from database------------------------------------------#

query2 = 'select \* from bill'

cursor.execute(query2)

result2 = cursor.fetchall()

if result2 == [] :

billno = 0

else:

for row in result2 :

billno = row[0]

#-----------------------------------------------Invoice Interface--------------------------------------------------#

print("\n---------------------------------USAVN Medical Shop Tumsar--------------------------------------\n")

billno = billno + 1 #int(input("Bill No. : "))

print("Bill No.",billno)

print("Date & Time :", Time)

pname = input("Name of patient : ") # Patient name

query1 = 'select \* from bill where Billno = {}'.format(billno)

cursor.execute(query1)

result1 = cursor.fetchall()

#----------------------------inserting current billno. to database--------------------------------------------#

if result1 == [] :

query0 = 'insert into bill values({}, "{}", "{}")'.format(billno, pname, Date) # saving Bill No to database

cursor.execute(query0)

mycon.commit()

#-------------------------------------getting details about patient-------------------------------------------#

rdoc = input("Refered by Doctor : ")

add = input("Address of Patient : ")

n = int(input("Number of Medicines : ")) # getting the number of medicines prescibed by doctor

fname = (pname+ str(billno)+".csv")

#--------------Creating and opening a csv file using patient name and billno.------------------------#

with open(fname, mode = 'w', newline = '\n') as csvfile :

date0 = Date.strftime("%A, %d %B %Y")

time0 = str(Time)

time1 = time0[11:19]

#print(time1)

filewriter = csv.writer(csvfile,delimiter = ',')

#----------------------------------------Writing data onto csv file----------------------------------------------#

filewriter.writerow(["------------------------------------------------------USAVN Medical Shop Tumsar---------------------------------------------------"])

filewriter.writerow(["Bill No. : "+ str(billno),'','','','','','','', str(date0)])

filewriter.writerow(["Patient's Name : " + pname ,'','','','','','','', 'Issue Time :' + str(time1)])

filewriter.writerow(["Address : " + add ])

filewriter.writerow(["Refered by Doctor : " + rdoc ])

filewriter.writerow([])

filewriter.writerow(["Sr.No.", "Name of Medicine",'', " Manufacturing.Co.",'', "Batch No.", "Man.Date", "Exp.Date", "Quantity", "Price", "Amount"])

b = c =0

total = amt = 0

ans = 'y'

for i in range(n):

print("\nSr. No.", i+1)

nmed0 = input("Enter name of medicine : ") # Using the name of medicine the other details will be obtained from the database

nmed = nmed0.capitalize()

query1 = 'select \* from medical\_shop where Name\_of\_Med = "{}"'.format(nmed)

cursor.execute(query1)

result = cursor.fetchall()

for row in result:

if row[6] <= 50 :

print(row[1], 'is getting out of stock\n')

else:

pass

if result == []:

print("Sorry! medicine with name ", nmed, "not found\n")

b = 1

c = 0

csvfile.close()

break

for row in result: # Checking the existence of a medicine

if cursor.rowcount != 0 :

quan = int(input("Quantity : " ))

code = row[0] # Getting details according to name of medicine

nmanu = row[2] # Fetching data from database

batchn = row[3]

mandate0 = str(row[4])

mandate = mandate0[0:7]

expdate0 = str(row[5])

expdate = expdate0[0:7]

#print(mandate, expdate)

stockquant = row[6]

price = row[7]

#print(price)

oneprice = price / 10 # Calculating the amount of each tablet

amt = quan \* oneprice # Calculating the amount of One medicine

text = [str(i+1), nmed,'', nmanu,'', str(batchn), str(mandate), str(expdate), str(quan), str(price), str(amt)]

filewriter.writerow(text)

print()

total = total + amt # Total Amount

reduce() # Calling reduce function to reduce the purchased medicine from database

c = 1

if c == 1:

filewriter.writerow([])

filewriter.writerow(["Total Amount: " + str(total)])

filewriter.writerow(["Inclusive of all taxes. "])

csvfile.close()

print("\nInvoice Printed Successfully ")

print("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \n")

#-------------------------------------incase medicine not found-----------------------------------------------#

if b == 1:

os.remove(fname)

print("Invoice Printing Failed ! ")

print("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ")

queryde = 'delete from bill where billno = {}'.format(billno)

cursor.execute(queryde)

mycon.commit()

else :

print("Bill no.",billno, "present already\n")

print('%10s'%'Bill No.', '%20s'%'Name of Patient', '%25s'%'Date',)

for row in result1 :

print('%10s'%row[0], '%20s'%row[1], '%25s'%row[2])

print()

#---------------------------Closing connection with database when user quits--------------------------#

elif ch == 3 :

break

mycon.close() # closing connection with database

else :

print("Invalid Input")