



Gulf Asian English School Sharjah

Department of Computer Science

A Project Report on

MOBILE SHOP

For AISSCE Examination (Term-1) – 2021

[As a part of the Computer Science course (083)]

Submitted by

Salman Farish

12 M



Gulf Asian English School, Sharjah

Department of Computer Science

Certificate

This is to certify that Salman Farish of grade 12 M has completed the Computer Science project on Mobile Shop under the guidance of Ms. Dhivya Anoop for AISCCE EXAMINATION (Term-1) 2021.

Internal Examiner

Date:

External Examiner

Date:

ACKNOWLEDGEMENT

I would take this opportunity to express my gratitude and thanks to Our Management and Principal Dr. Nasreen Banu for providing all the necessary resources and facilities in the school without which it would have not been possible to complete this project.

I would also extend my sincere thanks to my Computer Science teacher Ms. Dhivya Anoop for her guidance and support in completing this Project.

Finally, I also extend my heartfelt thanks to my Parents and Friends who helped and encouraged me a lot in finishing this project within the limited time.

Thanking You,

Name: Salman Farish

Class: 12 M

ABSTRACT

This project emphasis on creation of organized table of mobile phone details, to see price category or amount category of mobile phones according user's choice.

This project includes a detailed database of a mobile shop which is connected to python using MySQL connector. The user finds solution to the various choices generated by the program; implemented by using IDLE (Python) Shell and Script mode.

This program can further be developed by adding more choices.

This project can be updated using web-frameworks like Django for showing as a website so that their customers can see all the details about their mobiles from their home itself.

This project can also be updated using GUI modules like Tkinter for a more organized and dynamic view.

TABLE OF CONTENTS

S. No.	Content	Pg. No.
1.	Introduction	1
2.	Design	3
3.	Source Code	6
4.	Output	29
5.	Report 1	30
6.	Report 2 and Report 3	35
7.	Report 4 and Report 5	36
8.	Report 6 and Report 7	37
9.	Report 8	38
10.	Report 9	40
11.	Conclusion	41
12.	Bibliography	42

Introduction

“MOBILE SHOP”: This project is useful for the employees who works in the firm to keep a track of all mobile phone details.

Nowadays most of them have mobile phones as it has become one of the most important part of our life. Due to this reason, Mobile sectors are expanding greatly and the shares of the companies that manufacture mobiles never goes drastically down. Thus, many people who are thinking to start a new business goes with the idea of starting a mobile shop.

Since the business is expanding, a lot of different types of mobile phones are being bought. Hence, I chose to create a simple program for those owning a mobile shop to keep a record of the details of the mobiles they are selling.

The goal of the proposed project is to utilize various python functions and modules. This goal is achieved by using:

- User defined functions
- User input functions
- Loops
- Conditional statements
- SQL module

Each time the user is given ten choices.

- The first choice the user has the choice to enter new mobile phone details or to update or delete any existing details.
- Then in the second choice the user has to enter the 'SNo' of his choice then according to that 'SNo' that one mobile phone's details and specifications gets displayed in the python shell which is a quicker access for the user to know.
- In the third choice the user gets to know total number of companies at present within the table as more and more mobile phone models are being bought to the shop.
- Then at the fourth choice, the user can type the year of his/her choice to see mobile phone according to that year
- And in the fifth choice the user can type the price range of his/her wish to see models of mobile phone between that price categories.
- And in the sixth choice the user can type a name of the company of his/her choice to display all the mobile phones belonging to a company of your choice.
- And the seventh choice is just to enter S.No.'s of two mobile phones so that all their specifications are compared.
- And the eight choice is to sort mobiles according to cost or name.
- And the ninth choice is to show all mobile details present in the table
- Then at last tenth choice, it is just to exit the code.

This project can be used both by the users and the employees by creating respective accounts. But only the employees can change any information in the table. The program is useful for the sales department as it show mobiles in a particular price range or according to any other specifications.

Design

The program makes use of user defined functions, sql module and conditional statements. Conditional statements including if, elif and else are used in all the user defined functions as well as to use the necessary code block which the user requires.

First the user is asked to enter his name. This is done through a user defined function.

If his name present in the admin list, then he/she is asked to verify it's them by entering the correct password to enter the admin page. If password is correct means it enters the admin page, then he/she has given all the choices. Else password is wrong then he is asked his name again.

Else if it a user/customer, then he/she has given all the choices except the first one.

The first choice is that of adding new mobile phone details, updating /deleting existing mobile phone details. This choice is given only to the admin and is named 0th choice in the program.

And if the 0th choice (first choice) is chosen, it has 5 sub-options for the admin to choose from:

The first sub-option is to add the details of new mobile phone to the mobile_details or mobile_specifications table.

The second sub-option is to update any existing detail of any mobile in mobile_details or mobile_specifications table.

The third sub-option is to delete details of a existing mobile phone in mobile_details or mobile_specifications table.

All the three sub-options has internal choices to choose from mobile_details or mobile_specifications table.

The fourth sub-option is to go back which returns to the main menu function.

The fifth sub-option is to exit the program.

The 6th choice (seventh choice) is just to enter S.No.'s of two mobile phones so that all their specifications are compared in a tabular way and it also prints that whether which phone is better than the other.

The 7th choice (eight choice) is to sort according to cost or name. It has 4 sub-options to choose from:

The first sub-option is to sort according to name in ascending order.

The second sub-option is to sort according to name in descending order.

The third sub-option is to sort according to cost in ascending order.

The fourth sub-option is to sort according to cost in descending order.

The other choices includes filters for viewing the mobile details for a more organized way to show the customers according to their wishes. These choices are given to both users and the admin.

Another user defined function named menu() is used for MOBILE SHOP which encloses all the conditional statements to choose one from them as a menu driven options.

Tables used

1. mobile_details

```
mysql> desc mobile_details;
```

Field	Type	Null	Key	Default	Extra
SNo	int	NO	PRI	NULL	
Company	varchar(20)	YES		NULL	
Model	varchar(20)	YES		NULL	
Year	int	YES		NULL	
Cost	int	YES		NULL	

5 rows in set (0.08 sec)

2. mobile_specifications

```
mysql> desc mobile_specifications;
```

Field	Type	Null	Key	Default	Extra
SNo	int	NO	PRI	NULL	
Screen	varchar(7)	YES		NULL	
FrontCam	varchar(10)	YES		NULL	
BackCam	varchar(15)	YES		NULL	
Display	varchar(50)	YES		NULL	
RAM	varchar(7)	YES		NULL	
ROM	varchar(10)	YES		NULL	
Battery	varchar(15)	YES		NULL	
Processor	varchar(75)	YES		NULL	
Software	varchar(20)	YES		NULL	

10 rows in set (0.00 sec)

SOURCE CODE

To create database and tables

```
import mysql.connector as ms
db=ms.connect(host='localhost',user='root',password='1234')
a=input('Do you want to create database and tables (Yes/No) : ')
if a.lower()=='yes':
    print("")
    c1=db.cursor()
    c1.execute('create database Mobile_Shop;')
    c1.execute('use Mobile_Shop')
    c1.execute('create table Mobile_details(SNo integer primary key, Company
varchar(20), Model varchar(20), Year integer, Cost integer);')
    c1.execute('create table Mobile_specifications(SNo integer primary key,
Screen varchar(7), FrontCam varchar(10), BackCam varchar(15), Display
varchar(10), RAM varchar(7), ROM varchar(10), Battery varchar(15), Processor
varchar(20), Software varchar(20));')
    print('Database and Tables are created')
```

Main Code:

```
import mysql.connector

db = mysql.connector.connect(host="localhost", user="root",
password="1234",database="mobile_shop")

def user():

    u=input("Enter your name : ")

    admins=["Farish","Shehzad","Joshua"]

    if u in admins:

        a=admin(u)

    else:

        a=customer(u)

    print()

    menu(a)

def admin(i):

    print("----- Admins Only -----")

    p=input("Enter your password: ")

    if p == '1234':

        print("Welcome ",i)

        return 'admin'

    else:

        print("password incorrect")

        print("returning to main section...","\n")

        user()
```

```
def customer(i):  
    print("Welcome to our Mobile Shop,",i)  
    return 'customer'
```

```
def intError(o):  
    if o.isdigit():  
        o=int(o)  
    else:  
        print("Input Error: Enter int object !")  
        print()  
        manipulate()  
    return o
```

```
def Int_Error(o):  
    if o.isdigit():  
        o=int(o)  
    else:  
        print("Input Error: Enter int object !")  
        print()  
        menu()  
    return o
```

```
def manipulate():  
    while True:  
        print()
```

```

print("1: To enter new details.")
print("2: To update existing details.")
print("3: To delete existing details.")
print("4: To go back.")
print("5: To exit.")
ch2=input("Enter your choice : ")
ch2=intError(ch2)
if ch2 == 1:
    print("1: To enter new details in mobile_details table.")
    print("2: To enter new details in mobile_specifications table.")
    ch3=input("Enter your choice : ")
    ch3=intError(ch3)
    if ch3 == 1:
        print('Enter the following details:-')
        sno=input('Enter Serial No. (in integer) : ')
        sno=intError(sno)
        duplicate_key(sno)
        company=input('Enter the company name : ')
        model=input('Enter the model name : ')
        year=input('Enter the year (in integer): ')
        intError(year)
        cost=input('Enter the cost (in integer): ')
        intError(cost)
        c1=db.cursor()
        insert="insert into mobile_details values(%s,%s,%s,%s,%s);"

```

```

val=(sno,company,model,year,cost)
c1.execute(insert,val)
db.commit()
print('New mobile details added!')
print()
elif ch3 == 2:
    print('Enter the following details:-')
    sno=input('Enter Serial No(in integer) : ')
    sno=intError(sno)
    unique(sno)
    screen=input('Enter screen inch : ')
    frontcam=input("Enter front camera's pixel(in MP) : ")
    backcam=input("Enter back camera's pixel(in MP) : ")
    display=input('Enter display type : ')
    ram=input('Enter RAM (in GB) : ')
    rom=input('Enter Storage / ROM (in GB): ')
    battery=input('Enter battery capacity : ')
    processor=input('Enter processor : ')
    software=input('Enter software : ')
    c1=db.cursor()
    insert="insert into mobile_specifications
values(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s);"
val=(sno,screen,frontcam,backcam,display,ram,rom,battery,processor,software)
c1.execute(insert,val)
db.commit()
print('New mobile specifications added!')

```

```

else:
    print("Enter a valid input")

elif ch2 == 2:
    print("1: To update existing details in mobile_details table.")
    print("2: To update existing details in mobile_specifications table.")
    ch3=input("Enter your choice : ")
    ch3=intError(ch3)
    if ch3 == 1:
        sno=input("Enter the serial no. of the mobile whose details you want to
change : ")
        duplicate_key(sno)
        print("Enter what you want to update")
        print("""
            1:sno,
            2:company,
            3:model,
            4:year,
            5:cost, """)
        n=input("Enter your choice: ")
        n=intError(n)
        l=["SNo","Company","Model","Year","Cost"]
        u=l[n-1]
        newval=input("Enter the new value : ")
        c1=db.cursor()

```



```
c1.execute("update mobile_details set "+u+" = \"+newval+\" where  
sno = "+sno+";")
```

```
db.commit()
```

```
print('New mobile details updated!')
```

```
elif ch3==2:
```

```
sno=input("Enter the serial no. of the mobile whose specifications you  
want to change : ")
```

```
unique(sno)
```

```
print("Enter what you want to update")
```

```
print("""
```

```
1:sno,
```

```
2:screen,
```

```
3:frontcam,
```

```
4:backcam,
```

```
5:display,
```

```
6:ram,
```

```
7:rom,
```

```
8:battery,
```

```
9:processor,
```

```
10:software""")
```

```
n=input("Enter your choice: ")
```

```
n=intError(n)
```

```
l=["sno","screen","frontcam","backcam","display","ram","rom","battery","proce  
ssor","software"]
```

```
u=l[n-1]
```

```

        newval=input("Enter the new value : ")
        c1=db.cursor()
        c1.execute("update mobile_specifications set "+u+" = '"+newval+"'
where sno = "+sno+";")
        db.commit()
        print('New mobile specifications updated!')
    else:
        print("Enter a valid input!")
elif ch2 == 3:
    print("1: To delete existing details in mobile_details table.")
    print("2: To delete existing details in mobile_specifications table.")
    ch3=input("Enter your choice : ")
    ch3=intError(ch3)
    if ch3 == 1:
        sno=input("Enter the serial no. of the mobile whose details you want to
delete : ")
        sno=intError(sno)
        c1=db.cursor()
        c1.execute("delete from mobile_details where sno = "+str(sno)+";")
        db.commit()
        print("Sucessfully deleted the row")
    elif ch3 == 2:
        sno=input("Enter the serial no. of the mobile whose details you want to
delete : ")
        sno=intError(sno)
        c1=db.cursor()

```

```

        c1.execute("delete from mobile_specifications where sno =
"+str(sno)+";")
        db.commit()
        print("Sucessfully deleted the row")
    else:
        print("Enter a valid input!")
elif ch2 == 4:
    menu()
    break
elif ch2 == 5:
    print("-----x-----")
    break
else:
    print("Enter a valid choice !!!")

```

```

def duplicate_key(sno):
    c1=db.cursor()
    c1.execute('select * from mobile_details;')
    data=c1.fetchall()
    l1=[]
    for row in data:
        l1.append(row[0])
    if sno in l1:
        print("Serial No. already present")
        manipulate()

```

```

def unique(sno):
    c1=db.cursor()
    c1.execute('select * from mobile_specifications;')
    data=c1.fetchall()
    l1=[]
    for row in data:
        l1.append(row[0])
    if sno in l1:
        print("Serial No. already present")
        manipulate()

def compare():
    print("Enter two mobile's S.no.s to compare theirs specifications : ")
    n=input("Enter first mobile's S.no. :")
    m=input("Enter second mobile's S.no. :")
    n=Int_Error(n)
    m=Int_Error(m)
    c1=db.cursor()
    c1.execute('select * from mobile_details;')
    data=c1.fetchall()
    l1=[]
    l2=[]
    for row in data:
        if row[0]==n:

```

```

        if row not in l1:
            l1.append(row)
    elif row[0]==m:
        if row not in l2:
            l2.append(row)
if l1 == []:
    print("First mobile is not present in table !")
    menu()
elif l2 == []:
    print("Second mobile is not present in table !")
    menu()
for r in l1:
    for det in r:
        if det==r[0]:
            pass
        elif det==r[-1]:
            print(",end=")
        elif det==r[3]:
            print("(" ,det,")",sep=",end=")
        else:
            print(det,end=' ')
        a=det
for r in l2:
    for det in r:
        if det==r[0]:

```

```

        print("",end="\t"*6)
    elif det==r[-1]:
        print()
    elif det==r[3]:
        print("(",det,")",sep="",end="")
    else:
        print(det,end=' ')
    b=det

t=[]
if a>b:
    e='>'
elif a<b:
    e='<'
elif a==b:
    e='='

ce=''
if e=='>':
    ce='<'
elif e=='<':
    ce='>'
t.append(ce)
print('-'*100)
print('Cost      :',a,'Rs','\t'*3,' ',e+'\t'*3+'Cost      :',b,'Rs')

```

```

c1.execute('select * from mobile_specifications;')
data=c1.fetchall()

l3=[]
l4=[]

s=['S.No.','Screen','FrontCam','BackCam','Display','RAM','Storage','Battery','Processor','Software']

for row in data:
    if row[0]==n:
        if row not in l3:
            l3.append(row)
    elif row[0]==m:
        if row not in l4:
            l4.append(row)

l=len(l4)
n=0
for specs in l3:
    for i in specs:
        if n in [0,4,8,9]:
            eq=' '
        elif n in [2,3]:
            if eval(l3[l-1][n][:2])>eval(l4[l-1][n][:2]):
                eq='>'
            elif eval(l3[l-1][n][:2])<eval(l4[l-1][n][:2]):

```

```

        eq='<'
    elif eval(l3[l-1][n][:-2])==eval(l4[l-1][n][:-2]):
        eq='='
    else:
        if l3[l-1][n]>l4[l-1][n]:
            eq='>'
        elif l3[l-1][n]<l4[l-1][n]:
            eq='<'
        elif l3[l-1][n]==l4[l-1][n]:
            eq='='
    t.append(eq)

    print ("{:<10} {:<1} {:<30} {:<19} {:<10} {:<1}
{:<20}".format(s[n],":",specs[n],eq,s[n],":",l4[l-1][n]))

    n+=1

less=t.count('<')
great=t.count('>')

if less > great:
    print("second one is better than first")
elif less < great:
    print("first one is better than second")
elif less == great:
    print("Both are similar")

def print_details(data):
    l1=[]

```



```

for row in data:
    if row not in l1:
        l1.append(row)
for r in l1:
    for det in r:
        if det==r[-1]:
            cost='Cost:'+str(det)+'Rs'
        else:
            sno='S.No. '+str(r[0])
            name='\t'+r[1]+' '+r[2]+' '+'('+str(r[3])+')'
            print("{:<5} {:<30} {:<10} ".format(sno,name,cost))

```

```

def menu(a="admin"):
    print("MENU:-","\n")
    print("Enter:")
    while True:
        print()
        if a == 'admin':
            print("0: To enter new details or, update or delete existing details. ")
            print("1: To enter a mobile's S.no. and get its details and specifications. ")
            print("2: To display the names of mobile companies which are available here. ")
            print("3: To display all the mobile phones released in a year of your choice. ")
            print("4: To display all the mobile phones within a price range. ")
            print("5: To display all the mobile phones belonging to a company of your choice. ")

```

```

print("6: To compare specifications of two mobile phones ,if S.No.s of both
given. ")

print("7: To sort mobiles according to cost or name. ")

print("8: To show all mobile details present in the table")

print("9: To EXIT")

ch=input("Enter your choice : ")

if a == 'admin':

    if ch.isdigit():

        if int(ch)==0:

            manipulate()

            break

    else:

        print("Enter int value for choice !")

ch=Int_Error(ch)

if ch==1:

    n=input("Enter a mobile's S.no. to get its details and specifications : ")

    n=Int_Error(n)

    c1=db.cursor()

    c1.execute('select * from mobile_details;')

    data=c1.fetchall()

    l1=[]

    for row in data:

        if row[0]==n:

            if row not in l1:

                l1.append(row)

```

```

if l1 == []:
    print("Serial no. not there in the table !")
for r in l1:
    for det in r:
        if det==r[0]:
            print("",end='\t'*2)
        elif det==r[-1]:
            print('\t','Cost:',det,'Rs')
        elif det==r[3]:
            print("(" ,det,")",sep="",end="")
        else:
            print(det,end=' ')
    print()

```

```

c1.execute('select * from mobile_specifications;')
data=c1.fetchall()
l2=[]

```

```

s=['S.No.','Screen','FrontCam','BackCam','Display','RAM','Storage','Battery','Processor','Software']

```

```

for row in data:
    if row[0]==n:
        if row not in l2:
            l2.append(row)
for r in l2:
    n=0

```

```

        for specs in r:
            print(s[n],":",specs)
            n+=1
elif ch==2:
    c1=db.cursor()
    c1.execute('select distinct Company from mobile_details;')
    data=c1.fetchall()
    count=c1.rowcount
    print('Total number of Mobile companies available here = ',count)
    print('And they are :-')
    for row in data:
        print(row[0])
    print()
elif ch==3:
    c1=db.cursor()
    c1.execute('select * from mobile_details;')
    data=c1.fetchall()
    y=input("Enter a year to display all mobiles released in that year : ")
    y=Int_Error(y)
    l1=[]
    for row in data:
        if row[3]==y:
            if row not in l1:
                l1.append(row)
    count=len(l1)

```

```

        print('Total number of Mobile phones available here, released in ',y,' =
',count)

    if count != 0:

        print('And they are :-')

    for r in l1:

        for det in r:

            if det==r[0]:

                print("S.No.",det,end='\t'*2)

            elif det==r[3]:

                print("(" ,det,")",sep=",end=")

            elif det==r[-1]:

                print('\t','Cost:',det,'Rs')

            else:

                print(det,end=' ')

        print()

    elif ch==4:

        c1=db.cursor()

        c1.execute('select * from mobile_details;')

        data=c1.fetchall()

        print("To display all the mobile phones within a price range")

        p1=input("Enter from which price the range should start : ")

        p2=input("Enter price upto which the range should end : ")

        p1=Int_Error(p1)

        p2=Int_Error(p2)

        if not p1<=p2:

```

```

        print("Range Error: From price should be greater or equal than to the
upto price !")

    menu()

l1=[]

for row in data:

    if row[-1] in range(p1,p2+1):

        if row not in l1:

            l1.append(row)

count=len(l1)

print('Total number of Mobile phones available here, beteen price range
',p1,'and',p2,' = ',count)

if count != 0:

    print('And they are :-')

for r in l1:

    for det in r:

        if det==r[0]:

            print("S.No.",det,end='\t'*2)

        elif det==r[3]:

            print("(" ,det,")",sep=",end=")

        elif det==r[-1]:

            print('\t','Cost:',det,'Rs')

        else:

            print(det,end=' ')

print()

```

```

elif ch==5:
    c1=db.cursor()
    c1.execute('select * from mobile_details;')
    data=c1.fetchall()
    print("To display all the mobile phones from a particular company")
    cn=input("Enter company name : ")
    l1=[]
    for row in data:
        if row[1].lower() == cn.lower():
            if row not in l1:
                l1.append(row)
    count=len(l1)
    print('Total number of Mobile phones available here, from ',cn,'=',count)
    if count != 0:
        print('And they are :-')
        for r in l1:
            for det in r:
                if det==r[0]:
                    print("S.No.",det,end='\t'*2)
                elif det==r[3]:
                    print("(",det,")",sep="",end="")
                elif det==r[-1]:
                    print('\t','Cost:',det,'Rs',end='\t')
            else:
                print(det,end=' ')

```

```

        print()
elif ch==6:
    compare()
elif ch==7:

    print("Choose one of the option to sort mobiles according to it: ")
    print("1: To sort according to name in ascending order.")
    print("2: To sort according to name in descending order.")
    print("3: To sort according to cost in ascending order.")
    print("4: To sort according to cost in descending order.")
    sort=input("Enter choice : ")
    sort=Int_Error(sort)
    if sort==1:
        c1=db.cursor()
        c1.execute('select * from mobile_details order by company,model;')
        data=c1.fetchall()
    elif sort==2:
        c1=db.cursor()
        c1.execute('select * from mobile_details order by company desc,model
desc;')
        data=c1.fetchall()
    elif sort==3:
        c1=db.cursor()
        c1.execute('select * from mobile_details order by Cost;')
        data=c1.fetchall()
    elif sort==4:

```



```

        c1=db.cursor()
        c1.execute('select * from mobile_details order by Cost desc;')
        data=c1.fetchall()
    else:
        print("Enter a valid choice!")
        menu()
    print("The sorted data:")
    print_details(data)
    print()
elif ch == 8 :
    c1=db.cursor()
    c1.execute('select * from mobile_details;')
    data=c1.fetchall()
    print("All the mobiles present in our shop are :- ")
    print_details(data)
    print()
elif ch == 9 :
    print("Thank You!")
    print("Visit again....")
    print("Have a nice day :)")
    break
else:
    print("Enter a valid choice ... ")
    print()
user()

```

Output to create database and tables:

```
>>> %Run Create.py
Do you want to create database and tables (Yes/No) : Yes
Database and Tables are created
```

Other outputs:

```
Python 3.7.9 (bundled)
>>> %Run 'Mobile Shop.py'

Enter your name : Farish
----- Admins Only -----
Enter your password: 77777
password incorrect
returning to main section...

Enter your name : |
```

```
Enter your name : Farish
----- Admins Only -----
Enter your password: 1234
Welcome Farish

MENU:-

Enter:
0: To enter new details or, update or delete existing details.
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : |
```

Report 1

MENU:-

Enter:

- 0: To enter new details or, update or delete existing details.
- 1: To enter a mobile's S.no. and get its details and specifications.
- 2: To display the names of mobile companies which are available here.
- 3: To display all the mobile phones released in a year of your choice.
- 4: To display all the mobile phones within a price range.
- 5: To display all the mobile phones belonging to a company of your choice.
- 6: To compare specifications of two mobile phones ,if S.No.s of both given.
- 7: To sort mobiles according to cost or name.
- 8: To show all mobile details present in the table
- 9: To EXIT

Enter your choice : 0

- 1: To enter new details.
- 2: To update existing details.
- 3: To delete existing details.
- 4: To go back.
- 5: To exit.

Enter your choice : |

Report 1.1.1

```
1: To enter new details.
2: To update existing details.
3: To delete existing details.
4: To go back.
5: To exit.
Enter your choice : 1
1: To enter new details in mobile_details table.
2: To enter new details in mobile_specifications table.
Enter your choice : 1
Enter the following details:-
Enter Serial No. (in integer) : 1
Enter the company name : Samsung
Enter the model name : S21 FE
Enter the year (in integer): 2022
Enter the cost (in integer): 54999
New mobile details added!
```

Report 1.1.2

```
Enter your choice : 1
1: To enter new details in mobile_details table.
2: To enter new details in mobile_specifications table.
Enter your choice : 2
Enter the following details:-
Enter Serial No(in integer) : 1
Enter screen inch : 6.4"
Enter front camera's pixel(in MP) : 32 MP
Enter back camera's pixel(in MP) : 12+8+12 MP
Enter display type : Dynamic AMOLED 2X
Enter RAM (in GB) : 8GB
Enter Storage / ROM (in GB): 256 GB
Enter battery capacity : 45000 mAh
Enter processor : Snapdragon 888
Enter software : Android 12
New mobile specifications added!
```

Report 1.2.1

```
1: To enter new details.
2: To update existing details.
3: To delete existing details.
4: To go back.
5: To exit.
Enter your choice : 2
1: To update existing details in mobile_details table.
2: To update existing details in mobile_specifications table.
Enter your choice : 1
Enter the serial no. of the mobile whose details you want to change : 7
Enter what you want to update

1:sno,
2:company,
3:model,
4:year,
5:cost,

Enter your choice: 3
Enter the new value : A12
New mobile details updated!
```

Report 1.2.2

```
1: To enter new details.
2: To update existing details.
3: To delete existing details.
4: To go back.
5: To exit.
Enter your choice : 2
1: To update existing details in mobile_details table.
2: To update existing details in mobile_specifications table.
Enter your choice : 2
Enter the serial no. of the mobile whose specifications you want to change : 1
Enter what you want to update

1:sno,
2:screen,
3:frontcam,
4:backcam,
5:display,
6:ram,
7:rom,
8:battery,
9:processor,
10:software

Enter your choice: 6
Enter the new value : 8 GB
New mobile specifications updated!
```

Report 1.3.1

```
1: To enter new details.
2: To update existing details.
3: To delete existing details.
4: To go back.
5: To exit.
Enter your choice : 3
1: To delete existing details in mobile_details table.
2: To delete existing details in mobile_specifications table.
Enter your choice : 1
Enter the serial no. of the mobile whose details you want to delete : 2
Sucessfully deleted the row
```

Report 1.3.2

```
1: To enter new details.
2: To update existing details.
3: To delete existing details.
4: To go back.
5: To exit.
Enter your choice : 3
1: To delete existing details in mobile_details table.
2: To delete existing details in mobile_specifications table.
Enter your choice : 2
Enter the serial no. of the mobile whose details you want to delete : 2
Sucessfully deleted the row
```

Report 1.4

```
1: To enter new details.
2: To update existing details.
3: To delete existing details.
4: To go back.
5: To exit.
Enter your choice : 4
MENU:-

Enter:
0: To enter new details or, update or delete existing details.
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : |
```

Report 1.5

```
1: To enter new details.  
2: To update existing details.  
3: To delete existing details.  
4: To go back.  
5: To exit.  
Enter your choice : 5
```

```
-----x-----
```

```
>>> |
```

if it's not admin then first choice, i.e., 0th choice is not given

```
Enter your name : Salman  
Welcome to our Mobile Shop, Salman
```

```
MENU:-
```

```
Enter:
```

```
1: To enter a mobile's S.no. and get its details and specifications.  
2: To display the names of mobile companies which are available here.  
3: To display all the mobile phones released in a year of your choice.  
4: To display all the mobile phones within a price range.  
5: To display all the mobile phones belonging to a company of your choice.  
6: To compare specifications of two mobile phones ,if S.No.s of both given.  
7: To sort mobiles according to cost or name.  
8: To show all mobile details present in the table  
9: To EXIT  
Enter your choice : 1
```

Report 2

```
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : 1
Enter a mobile's S.no. to get its details and specifications : 1
                Samsung S21 FE (2022)      Cost: 54999 Rs

S.No. : 1
Screen : 6.4"
FrontCam : 32 MP
BackCam : 12+8+12 MP
Display : Dynamic AMOLED 2X
RAM : 8GB
Storage : 256 GB
Battery : 45000 mAh
Processor : Snapdragon 888
Software : Android 12
```

Report 3

```
0: To enter new details or, update or delete existing details.
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : 2
Total number of Mobile companies available here = 6
And they are :-
Samsung
Apple
Apple
OnePlus
Xiaomi
Realme
```


Report 4

```
0: To enter new details or, update or delete existing details.
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : 3
Enter a year to display all mobiles released in that year : 2022
Total number of Mobile phones available here, released in 2022 = 4
And they are :-
S.No. 1          Samsung S21 FE (2022)      Cost: 54999 Rs

S.No. 2          Samsung Galaxy A13 (2022)      Cost: 18790 Rs

S.No. 14         OnePlus 10 Pro (2022)      Cost: 54590 Rs

S.No. 16         Realme GT2 Pro (2022)      Cost: 45790 Rs
```

Report 5

```
Enter your choice : 4
To display all the mobile phones within a price range
Enter from which price the range should start : 40000
Enter price upto which the range should end : 100000
Total number of Mobile phones available here, beteen price range 40000 and 100000 = 7
And they are :-
S.No. 1          Samsung S21 FE (2022)      Cost: 54999 Rs

S.No. 10         Apple iPhone 13 (2021)    Cost: 79900 Rs

S.No. 11         Apple iPhone XS (2018)    Cost: 99900 Rs

S.No. 12         Apple iPhone 11 Pro (2019) Cost: 99750 Rs

S.No. 14         OnePlus 10 Pro (2022)      Cost: 54590 Rs

S.No. 15         Xiaomi 12 (2021)          Cost: 55190 Rs

S.No. 16         Realme GT2 Pro (2022)      Cost: 45790 Rs
```

Report 6

```
0: To enter new details or, update or delete existing details.
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : 5
To display all the mobile phones from a particular company
Enter company name : Samsung
Total number of Mobile phones available here, from Samsung = 9
And they are :-
S.No. 1      Samsung S21 FE (2022)      Cost: 54999 Rs
S.No. 2      Samsung Galaxy A13 (2022)      Cost: 18790 Rs
S.No. 3      Samsung Galaxy A52 (2021)      Cost: 26790 Rs
S.No. 4      Samsung Galaxy F42 (2021)      Cost: 20999 Rs
S.No. 5      Samsung Galaxy M51 (2020)      Cost: 24999 Rs
S.No. 6      Samsung A21s (2020)      Cost: 16499 Rs
S.No. 7      Samsung A12 (2021)      Cost: 10999 Rs
S.No. 8      Samsung Galaxy A50 (2019)      Cost: 19990 Rs
S.No. 9      Samsung Galaxy A70 (2019)      Cost: 28990 Rs
```

Report 7

```
Enter your choice : 6
Enter two mobile's S.no.s to compare their specifications :
Enter first mobile's S.no. :1
Enter second mobile's S.no. :5
Samsung S21 FE (2022)                                Samsung Galaxy M51 (2020)
-----
Cost      : 54999 Rs                                >      Cost      : 24999 Rs
S.No.     : 1                                        >      S.No.     : 5
Screen    : 6.4"                                    <      Screen    : 6.7"
FrontCam  : 32 MP                                    =      FrontCam  : 32 MP
BackCam   : 12+8+12 MP                               <      BackCam   : 64+12+5+5 MP
Display   : Dynamic AMOLED 2X                        >      Display   : AMOLED Infinity-O
RAM       : 8 GB                                      >      RAM       : 6 GB
Storage   : 256 GB                                   >      Storage   : 128 GB
Battery   : 45000 mAh                                <      Battery   : 45000mAh
Processor : Snapdragon 888                            >      Processor : Snapdragon 720g
Software  : Android 12                                >      Software  : Android 11
second one is better than first
```

Report 8.1

```
Enter your choice : 7
Choose one of the option to sort mobiles according to it:
1: To sort according to name in ascending order.
2: To sort according to name in descending order.
3: To sort according to cost in ascending order.
4: To sort according to cost in descending order.
Enter choice : 1
The sorted data:
S.No. 12      Apple iPhone 11 Pro (2019)      Cost:99750Rs
S.No. 13      Apple iPhone 12 Pro (2020)      Cost:119900Rs
S.No. 10      Apple iPhone 13 (2021)          Cost:79900Rs
S.No. 11      Apple iPhone XS (2018)          Cost:99900Rs
S.No. 14      OnePlus 10 Pro (2022)           Cost:54590Rs
S.No. 16      Realme GT2 Pro (2022)           Cost:45790Rs
S.No. 7       Samsung A12 (2021)              Cost:10999Rs
S.No. 6       Samsung A21s (2020)             Cost:16499Rs
S.No. 2       Samsung Galaxy A13 (2022)        Cost:18790Rs
S.No. 8       Samsung Galaxy A50 (2019)        Cost:19990Rs
S.No. 3       Samsung Galaxy A52 (2021)        Cost:26790Rs
S.No. 9       Samsung Galaxy A70 (2019)        Cost:28990Rs
S.No. 4       Samsung Galaxy F42 (2021)        Cost:20999Rs
S.No. 5       Samsung Galaxy M51 (2020)        Cost:24999Rs
S.No. 1       Samsung S21 FE (2022)           Cost:54999Rs
S.No. 15      Xiaomi 12 (2021)                Cost:55190Rs
```

Report 8.2

```
Enter your choice : 7
Choose one of the option to sort mobiles according to it:
1: To sort according to name in ascending order.
2: To sort according to name in descending order.
3: To sort according to cost in ascending order.
4: To sort according to cost in descending order.
Enter choice : 2
The sorted data:
S.No. 15      Xiaomi 12 (2021)                Cost:55190Rs
S.No. 1       Samsung S21 FE (2022)           Cost:54999Rs
S.No. 5       Samsung Galaxy M51 (2020)        Cost:24999Rs
S.No. 4       Samsung Galaxy F42 (2021)        Cost:20999Rs
S.No. 9       Samsung Galaxy A70 (2019)        Cost:28990Rs
S.No. 3       Samsung Galaxy A52 (2021)        Cost:26790Rs
S.No. 8       Samsung Galaxy A50 (2019)        Cost:19990Rs
S.No. 2       Samsung Galaxy A13 (2022)        Cost:18790Rs
S.No. 6       Samsung A21s (2020)             Cost:16499Rs
S.No. 7       Samsung A12 (2021)              Cost:10999Rs
S.No. 16      Realme GT2 Pro (2022)           Cost:45790Rs
S.No. 14      OnePlus 10 Pro (2022)           Cost:54590Rs
S.No. 11      Apple iPhone XS (2018)          Cost:99900Rs
S.No. 10      Apple iPhone 13 (2021)          Cost:79900Rs
S.No. 13      Apple iPhone 12 Pro (2020)      Cost:119900Rs
S.No. 12      Apple iPhone 11 Pro (2019)      Cost:99750Rs
```

Report 8.3

```
Enter your choice : 7
Choose one of the option to sort mobiles according to it:
1: To sort according to name in ascending order.
2: To sort according to name in descending order.
3: To sort according to cost in ascending order.
4: To sort according to cost in descending order.
Enter choice : 3
The sorted data:
S.No. 7      Samsung A12 (2021)      Cost:10999Rs
S.No. 6      Samsung A21s (2020)    Cost:16499Rs
S.No. 2      Samsung Galaxy A13 (2022) Cost:18790Rs
S.No. 8      Samsung Galaxy A50 (2019) Cost:19990Rs
S.No. 4      Samsung Galaxy F42 (2021) Cost:20999Rs
S.No. 5      Samsung Galaxy M51 (2020) Cost:24999Rs
S.No. 3      Samsung Galaxy A52 (2021) Cost:26790Rs
S.No. 9      Samsung Galaxy A70 (2019) Cost:28990Rs
S.No. 16     Realme GT2 Pro (2022)   Cost:45790Rs
S.No. 14     OnePlus 10 Pro (2022)   Cost:54590Rs
S.No. 1      Samsung S21 FE (2022)   Cost:54999Rs
S.No. 15     Xiaomi 12 (2021)        Cost:55190Rs
S.No. 10     Apple iPhone 13 (2021)   Cost:79900Rs
S.No. 12     Apple iPhone 11 Pro (2019) Cost:99750Rs
S.No. 11     Apple iPhone XS (2018)   Cost:99900Rs
S.No. 13     Apple iPhone 12 Pro (2020) Cost:119900Rs
```

Report 8.4

```
Enter your choice : 7
Choose one of the option to sort mobiles according to it:
1: To sort according to name in ascending order.
2: To sort according to name in descending order.
3: To sort according to cost in ascending order.
4: To sort according to cost in descending order.
Enter choice : 4
The sorted data:
S.No. 13     Apple iPhone 12 Pro (2020) Cost:119900Rs
S.No. 11     Apple iPhone XS (2018)     Cost:99900Rs
S.No. 12     Apple iPhone 11 Pro (2019) Cost:99750Rs
S.No. 10     Apple iPhone 13 (2021)     Cost:79900Rs
S.No. 15     Xiaomi 12 (2021)           Cost:55190Rs
S.No. 1      Samsung S21 FE (2022)       Cost:54999Rs
S.No. 14     OnePlus 10 Pro (2022)       Cost:54590Rs
S.No. 16     Realme GT2 Pro (2022)       Cost:45790Rs
S.No. 9      Samsung Galaxy A70 (2019)   Cost:28990Rs
S.No. 3      Samsung Galaxy A52 (2021)   Cost:26790Rs
S.No. 5      Samsung Galaxy M51 (2020)   Cost:24999Rs
S.No. 4      Samsung Galaxy F42 (2021)   Cost:20999Rs
S.No. 8      Samsung Galaxy A50 (2019)   Cost:19990Rs
S.No. 2      Samsung Galaxy A13 (2022)   Cost:18790Rs
S.No. 6      Samsung A21s (2020)         Cost:16499Rs
S.No. 7      Samsung A12 (2021)          Cost:10999Rs
```

Report 9

```
Enter your choice : 8
All the mobiles present in our shop are :-
S.No. 1      Samsung S21 FE (2022)      Cost:54999Rs
S.No. 2      Samsung Galaxy A13 (2022)    Cost:18790Rs
S.No. 3      Samsung Galaxy A52 (2021)    Cost:26790Rs
S.No. 4      Samsung Galaxy F42 (2021)    Cost:20999Rs
S.No. 5      Samsung Galaxy M51 (2020)    Cost:24999Rs
S.No. 6      Samsung A21s (2020)          Cost:16499Rs
S.No. 7      Samsung A12 (2021)           Cost:10999Rs
S.No. 8      Samsung Galaxy A50 (2019)    Cost:19990Rs
S.No. 9      Samsung Galaxy A70 (2019)    Cost:28990Rs
S.No. 10     Apple iPhone 13 (2021)           Cost:79900Rs
S.No. 11     Apple iPhone XS (2018)          Cost:99900Rs
S.No. 12     Apple iPhone 11 Pro (2019)        Cost:99750Rs
S.No. 13     Apple iPhone 12 Pro (2020)          Cost:119900Rs
S.No. 14     OnePlus 10 Pro (2022)                Cost:54590Rs
S.No. 15     Xiaomi 12 (2021)                     Cost:55190Rs
S.No. 16     Realme GT2 Pro (2022)                 Cost:45790Rs
```

Report 10

```
1: To enter a mobile's S.no. and get its details and specifications.
2: To display the names of mobile companies which are available here.
3: To display all the mobile phones released in a year of your choice.
4: To display all the mobile phones within a price range.
5: To display all the mobile phones belonging to a company of your choice.
6: To compare specifications of two mobile phones ,if S.No.s of both given.
7: To sort mobiles according to cost or name.
8: To show all mobile details present in the table
9: To EXIT
Enter your choice : 9
Thank You!
Visit again....
Have a nice day :)
```

CONCLUSION

The above program is made in a very simple code for people to access and manage the data for running a mobile shop. When compared with MYSQL for entering data, Python seems easy for this task. With several other choices this project can be developed. Python provides many functions and modules to work with and make such tasks easy. Commonly it is a decent language to program complex things rapidly.

Many projects have been programmed with the use of Python which shows us the efficiency of Python. Other projects like the school record, employee record, pharmacy record can also be programmed with the same idea as the Mobile Shop. In conclusion, this programming language is a very helpful source to put creative minds together and create such useful and fun coding projects.

BIBLIOGRAPHY

1. www.tutorialaicsip.com
2. Google

----- X -----