MOTHER'S GLOBAL SCHOOL

COMPUTER SCIENCE PRACTICAL FILE (2020-2021)

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12TH A
ROLL NO.25

1.
INPUT:

```
#Write a program to calculate the mean of a given list of numbers.
n=int(input("range:"))
j=0
for i in range(n):
    l=float(input("enter number:"))
    j+=l
mean=j/n
print("mean:",mean)
```

OUTPUT:

```
range:8
enter number:2
enter number:2
enter number:2
enter number:2
enter number:2
enter number:2
enter number:2
enter number:2.88
mean: 2.11
```

2.
INPUT:

```
#Write a program to calculate the minimum element of a given list of numbers.
a=[148485,8496,1.5,5,5894]
n=len(a)
print(a)
for i in range(n-1):
    for j in range(n-i-1):
        if a[j]>a[j+1]:
            a[j+1],a[j]=a[j],a[j+1]
print("minimum element:",a[0])
```

OUTPUT:

```
[148485, 8496, 1.5, 5, 5894]
minimum element: 1.5
```

3.
INPUT:

```
#Write a code to calculate and display total marks and percentage of a student from a given list storing the marks of a student.
n=int(input("RANGE:"))
d1={}

for i in range(n):
    l1=[1,1,1,1,1]
    a=str(input("Name:"))
    b=input("Comp.Sci. Marks:")
    c=input("Eng. Marks:")
    d=input("Math. Marks:")
    e=input("Phy. Marks:")
    f=input("Chem. Marks:")
    l1[0]=b
    l1[1]=c
    l1[2]=d
    l1[3]=e
    l1[4]=f
    d1[a]=l1
print(d1)


q=1
while q==1:
    z=input("Do you want to see marks and percentage of student Y/N:")
    if z=="Y":
        m=input("Enter name of student:")
        print("Marks","Cs:",d1[m][0],"Eng:",d1[m][1],"Math:",d1[m][2],"Phy:",d1[m][3],"Che:",d1[m][4])

print("percentage:",(float(d1[m][0])+float(d1[m][1])+float(d1[m][2])+float(d1[m][3])+float(d1[m][4]))*100/500)
    elif z=="N":
        q=0
```

OUTPUT:

```
RANGE:3
Name:siddhant
Comp.Sci. Marks:100
Eng. Marks:100
Math. Marks:100
Phy. Marks:100
Chem. Marks:100
Name:arjun
Comp.Sci. Marks:90
Eng. Marks:90
Math. Marks:90
Phy. Marks:90
```

Chem. Marks:90
Name:drishti
Comp.Sci. Marks:80
Eng. Marks:80
Math. Marks:80
Phy. Marks:80
Chem. Marks:80
{'siddhant': ['100', '100', '100', '100', '100'], 'arjun': ['90', '90', '90', '90', '90'], 'drishti': ['80', '80', '80', '80', '80']}
Do you want to see marks and percentage of student Y/N:Y
Enter name of student:siddhant
Marks Cs: 100 Eng: 100 Math: 100 Phy: 100 Che: 100
percentage: 100.0
Do you want to see marks and percentage of student Y/N:N

4.
INPUT:

```
#Write a Program to multiply an element by 2 if it is an odd index for a given list containing both numbers and strings.
l1=[8958,88.05623,"yvyh",1,"95"]
print(l1)
for i in range(len(l1)):
    if (i%2)!=0:
        l1[i]*=2
print(l1)
```

OUTPUT:

```
[8958, 88.05623, 'yvyh', 1, '95']
[8958, 176.11246, 'yvyh', 2, '95']
```

5.
INPUT:

```
#Write a Program to count the frequency of an element in a given list.
l1=[]
d={}
n=int(input("enter the number of elemets:"))
for i in range(0,n):
   a=input("Enter the element:")
   l1.append(a)

print("list:",l1)
for i in l1:
   b=l1.count(i)
   d[i]=b
print("frequencies:",d)
```

OUTPUT:

```
enter the number of elemets:4
Enter the element:asa
Enter the element:asd
Enter the element:asa
Enter the element:asa
list: ['asa', 'asd', 'asa', 'asa']
frequencies: {'asa': 3, 'asd': 1}
```

6.
INPUT:

```
#Write a Program to shift elements of a list so that the first element moves to the second index and second index moves to the third index, and so on, and the last element shifts to the first position. Suppose the list is [10,20,30,40] After shifting, it should look like: [40,10,20,30]
l1=[10,20,30,40]
print(l1)
l1.insert(0,l1[-1])
l1.pop(-1)
print("new list:",l1)
```

OUTPUT:

```
[10, 20, 30, 40]
new list:[40, 10, 20, 30]
```

7.
INPUT:

#A list Num contains the following elements:3, 25, 13, 6, 35, 8, 14, 45.Write a function to swap the content with the next value divisible by 5 so that the.resultant list will look like: 25, 3, 13, 35, 6, 8, 45, 14

```
l1=[3, 25, 13, 6, 35, 8, 14, 45]
k=0
while k<len(l1):
   if l1[k]%5==0:
      l1[k-1],l1[k]=l1[k],l1[k-1]
      k+=1
   else:
      k+=1
print(l1)
```

OUTPUT:

[25, 3, 13, 35, 6, 8, 45, 14]

8.
INPUT:

#Write a program to accept values from a user in a tuple. Add a tuple to it and display its elements one by one. Also display its maximum and minimum value.

```
#tuple formation:
t1=()
n1=int(input("enter the no. of  values:"))
for i in range(n1):
    j=input("enter element:")
    t1+=(j,)
print("your tuple",t1)

#tuple element display
print("tuple elements:")
for i in t1:
    print(i)

#max and min:
a=list(t1)
n=len(a)
for i in range(n-1):
    for j in range(n-i-1):
        if a[j]>a[j+1]:
            a[j+1],a[j]=a[j],a[j+1]
maximum_value=a[-1]
minimum_value=a[0]
print("maximum_value:",maximum_value)
print("minimum_value:",minimum_value)
```

OUTPUT:

```
enter the no. of  values:4
enter element:876
enter element:5296.428
enter element:48
enter element:623
your tuple ('876', '5296.428', '48', '623')
tuple elements:
876
5296.428
48
623
maximum_value: 876
minimum_value: 48
```

9.
INPUT:

```
#Write a program to input any values for two tuples. Print it, interchange it and then compare them.
#tuple formation:
t1=()
n1=int(input("enter the no. of  values for both tuple 1 & tuple 2:"))
for i1 in range(n1):
    j1=input("enter element:")
    t1+=(j1,)
print("your tuple:",t1)
#tuple formation:
t2=()
n2=n1
for i2 in range(n2):
    j2=input("enter element:")
    t2+=(j2,)
print("your tuple:",t2)
t1, t2 = t2, t1
print ("After swapping")
print ("First tuple")
print (t1)
print ("Second tuple")
print (t2)
if t1>t2:
    m="t1>t2"
elif t1==t2:
    m="t1=t2"
elif t1<t2:
    m="t1<t2"
print("comparison:",m)
```

OUTPUT:

```
enter the no. of  values for both tuple 1 & tuple 2:4
enter element:45
enter element:asd
enter element:4
enter element:a
your tuple: ('45', 'asd', '4', 'a')
enter element:53
enter element:5
enter element:5
enter element:5
your tuple: ('53', '5', '5', '5')
After swapping
First tuple
('53', '5', '5', '5')
Second tuple
('45', 'asd', '4', 'a')
comparison: t1>t2
```

10

INPUT:

.

#Write a Python program to input 'n' classes and names of their class teachers to store them in a dictionary and display the same. Also accept a particular class from the user and display the name of the class teacher of that class.

```
d={}
n=int(input("Enter the number of classes:"))
for i in range(0,n):
   a=input("Enter the name of class:")
   b=input("Enter the name of class teacher:")
   d[a]=b
print(d)
b=1
while b==1:
      c=input("do you want to see specific entry now Y/N:")
      if c=="Y":
            f=input("the entry name you want to see:")
            print(d[f])
      elif c=="N":
            b=0
```

OUTPUT:

```
Enter the number of classes:4
Enter the name of class:10
Enter the name of class teacher:nidhi maam
Enter the name of class:5
Enter the name of class teacher:shapili maam
Enter the name of class:7
Enter the name of class teacher:corona maam
Enter the name of class:5
Enter the name of class teacher:modi maam
{'10': 'nidhi maam', '5': 'modi maam', '7': 'corona maam'}
do you want to see specific entry now Y/N:Y
the entry name you want to see:5
modi maam
do you want to see specific entry now Y/N:Y
the entry name you want to see:7
corona maam
do you want to see specific entry now Y/N:N
```

11.
INPUT:

```
#Write a program to store student names and their percentage in a dictionary and delete a particular student name from the dictionary. Also display the dictionary after deletion.
d1={}
n=int(input("no. of students:"))
j=1
while j<=n:
    name=input("enter name:")
    per=float(input("enter percentage:"))
    d1[name]=per
    j+=1
print(d1)
b=1
while b==1:
    c=input("do you want to delete entry now Y/N:")
    if c=="Y":
        a=input("the entry name you want to delete:")
        d1.pop(a)
        print(d1)
    elif c=="N":
        b=0
```

OUTPUT:

```
no. of students:3
enter name:siddhant
enter percentage:100
enter name:arjun
enter percentage:100
enter name:piyush jain
enter percentage:100
{'siddhant': 100.0, 'arjun': 100.0, 'piyush jain': 100.0}
do you want to delete entry now Y/N:Y
the entry name you want to delete:arjun
{'siddhant': 100.0, 'piyush jain': 100.0}
do you want to delete entry now Y/N:N
```

12.
INPUT:

#Write a Python program to input names of 'n' customers and their details like items bought, cost and phone number, etc., store them in a dictionary and display all the details in a tabular form.

```
e=dict()
n=int(input("Enter the number of customers:"))
for i in range(0,n):
   l=[]
   a=str(input("Enter the name of the customer:"))
   b=str(input("Enter the name of item bought:"))
   c=int(input("Enter the cost:"))
   d=int(input("Enter the Phone number:"))
   l.append(b)
   l.append(c)
   l.append(d)
   e[a]=l
print("Name\tItem\tCost\tPhone Number")
for i in e:
   print(i,"\t",e[i][0],"\t",e[i][1],"\t",e[i][2])
```

OUTPUT:

```
Enter the number of customers:3
Enter the name of the customer:a
Enter the name of item bought:dahi
Enter the cost:100
Enter the Phone number:100
Enter the name of the customer:arjun
Enter the name of item bought:div
Enter the cost:10000
Enter the Phone number:10000
Enter the name of the customer:sid
Enter the name of item bought:mgs
Enter the cost:1000000
Enter the Phone number:8076218888
Name    Item     Cost      Phone Number
a          dahi     100       100
arjun     div       10000   10000
sid        mgs      1000000  8076218888
```

13.
INPUT:

```
#Write a Python program to capitalize first and last letters of each word of a given string.
s1=str(input("Enter the string"))
a=""
l1=list(s1.split(" "))
for i in l1:
    if len(i)==1:
        a+=i[0:1].upper()+" "
    else:
        a+=i[0:1].upper()+i[1:-1]+i[-1].upper()+" "
print(a)
```

OUTPUT:

```
Enter the stringa Quick brown 69 dog jump over himalaya
A QuicK BrowN 69 DoG JumP OveR HimalayA
```

14.
INPUT:

```
#Write a Python program to remove duplicate characters of a given string.
a=str(input("Enter the string:"))
b=""
l=[]
for i in a:
   if i not in l:
      b+=i
      l.append(i)
print(b)
```

OUTPUT:

```
Enter the string:HEllo World i am siddhant bali
HElo Wrdiamshntb
```

15.
INPUT:

```
#Write a Python program to compute sum of digits of a given string.
s1=str(input("ENTER STRING:"))
#process
sums=0
for i in s1:
    if i.isdigit()==True:
        sums+=int(i)
print(sums)
```

OUTPUT:

```
ENTER STRING:111111   cd sdlkvnj1111
10
```

16.
INPUT:

```
#Write a Python program to find the second most repeated word in a given string.
a=str(input("Enter the string"))
l=a.split(" ")
d={}
for i in l:
   b=l.count(i)
   d[b]=i
c=list(d.keys())
c.sort()
z=c[1]
print("the element which has occure second most times is",d[z])
```

OUTPUT:

```
Enter the stringA QuicK BrowN 69 DoG JumP OveR HimalayA DoG DoG DoG DoG HimalayA
the element which has occure second most times is HimalayA
```

17.
INPUT:

```
#Write a Python program to change a given string to a new string where the first and last chars have been exchanged.
a=str(input("Enter the string:"))
b=len(a)
c=a[-1]+a[1:(b-1)]+a[0]
print(c)
```

OUTPUT:

```
Enter the string:sansknsakd
dansknsaks
```

18.
INPUT:

```
#Write a Python program to multiply all the items in a list.
l1=[1963,82,89.665,55,8,1]
s=1
for i in l1:
    s*=i
print(s)
```

OUTPUT:

6350527211.6

19.
INPUT:

```
#Write a Python program to get the smallest number from a list.
n=int(input("Enter the number of elements:"))
a=[]
for i in range(0,n):
   a1=float(input("Enter the element:"))
   a.append(a1)
#Bubble Sort
n=len(a)
print("LIST:",a)
for i in range(n-1):
      for j in range(n-i-1):
            if a[j]>a[j+1]:
                  a[j+1],a[j]=a[j],a[j+1]
print("SMALLEST ELEMENT:",a[0])
```

OUTPUT:

```
Enter the number of elements:6
Enter the element:296.623
Enter the element:26
Enter the element:05
Enter the element:5
Enter the element:5
Enter the element:6
LIST: [296.623, 26.0, 5.0, 5.0, 5.0, 6.0]
SMALLEST ELEMENT: 5.0
```

20.
INPUT:

```
#Write a Python program to append a list to the second list.
l1=[1,96,9,8,1,2,3,0,4,7,5,60,4]
l2=[1963,82,89.665,55,8,1]
print('first list:',l1)
print('second list:',l2)
for i in l1:
      l2.append(i)
print("now second list is:",l2)
```

OUTPUT:

```
first list: [1, 96, 9, 8, 1, 2, 3, 0, 4, 7, 5, 60, 4]
second list: [1963, 82, 89.665, 55, 8, 1]
now second list is: [1963, 82, 89.665, 55, 8, 1, 1, 96, 9, 8, 1, 2, 3, 0, 4, 7, 5, 60, 4]
```

21.
INPUT:

#Write a Python program to generate and print a list of first and last 5 elements where the values are square of numbers between 1 and 30 (both included).

```
n=int(input("Range:"))
l1=[]
for i in range(0,n):
   if i*i>=1 and i*i<=n:
      l1.append(i)
print(l1)
print("First 5 numbers are",l1[0:5])
print("Last 5 numbers are",l1[-1:-6:-1])
```

OUTPUT:

```
Range:30
[1, 2, 3, 4, 5]
First 5 numbers are [1, 2, 3, 4, 5]
Last 5 numbers are [5, 4, 3, 2, 1]
```

22.
INPUT:

```
#Write a Python program to get unique values from a list.
n=int(input("Enter the number of elements:"))
a=[]
for i in range(0,n):
   a1=input("Enter the element:")
   a.append(a1)
print("ACTUAL LIST:",a)
l=[]
for i in a:
   if i not in l:
      l.append(i)
print("LIST HAVING UNIQUE ELEMENTS:",l)
```

OUTPUT:

```
Enter the number of elements:6
Enter the element:ASD
Enter the element:ADS
Enter the element:ASD
Enter the element:ASD
Enter the element:FGH
Enter the element:FGH
ACTUAL LIST: ['ASD', 'ADS', 'ASD', 'ASD', 'FGH', 'FGH']
LIST HAVING UNIQUE ELEMENTS: ['ASD', 'ADS', 'FGH']
```

23.
INPUT:

```
#Write a Python program to convert a string to a list.
l1=[]
a=str(input("Enter the STRING:"))
l1.extend(a)
print(l1)
```

OUTPUT:

```
Enter the STRING:SDASCDASKU KJNJSADA5662465
['S', 'D', 'A', 'S', 'C', 'D', 'A', 'S', 'K', 'U', ' ', 'K', 'J', 'N', 'J', 'S', 'A', 'D', 'A', '5', '6', '6', '2', '4', '6', '5']
```

24.
INPUT:

#Write a Python script to concatenate the following dictionaries to create a new one: d1 = {'A':1, 'B':2, 'C':3} d2 = {'D':4} Output should be: {'A':1, 'B':2, 'C':3, 'D':4}

```
d1={'A':1,'B':2,'C':3}
d2={'D':4}
for i in d2:
   d1[i]=d2[i]
print("The new list is",d1)
```

OUTPUT:

The new list is {'A': 1, 'B': 2, 'C': 3, 'D': 4}

25.
INPUT:

```
#Write a Python script to check if a given key already exists in a dictionary.
n=int(input("Enter the number of elements:"))
di={}
for i in range(0,n):
   a=input("Enter the element:")
   b=input("Enter the value:")
   di[a]=b
d=list(di.keys())
a=input("Enter the key:")
if a in d:
   print("The given key exists")
else:
   print("The given key is INVAILD")
```

OUTPUT:

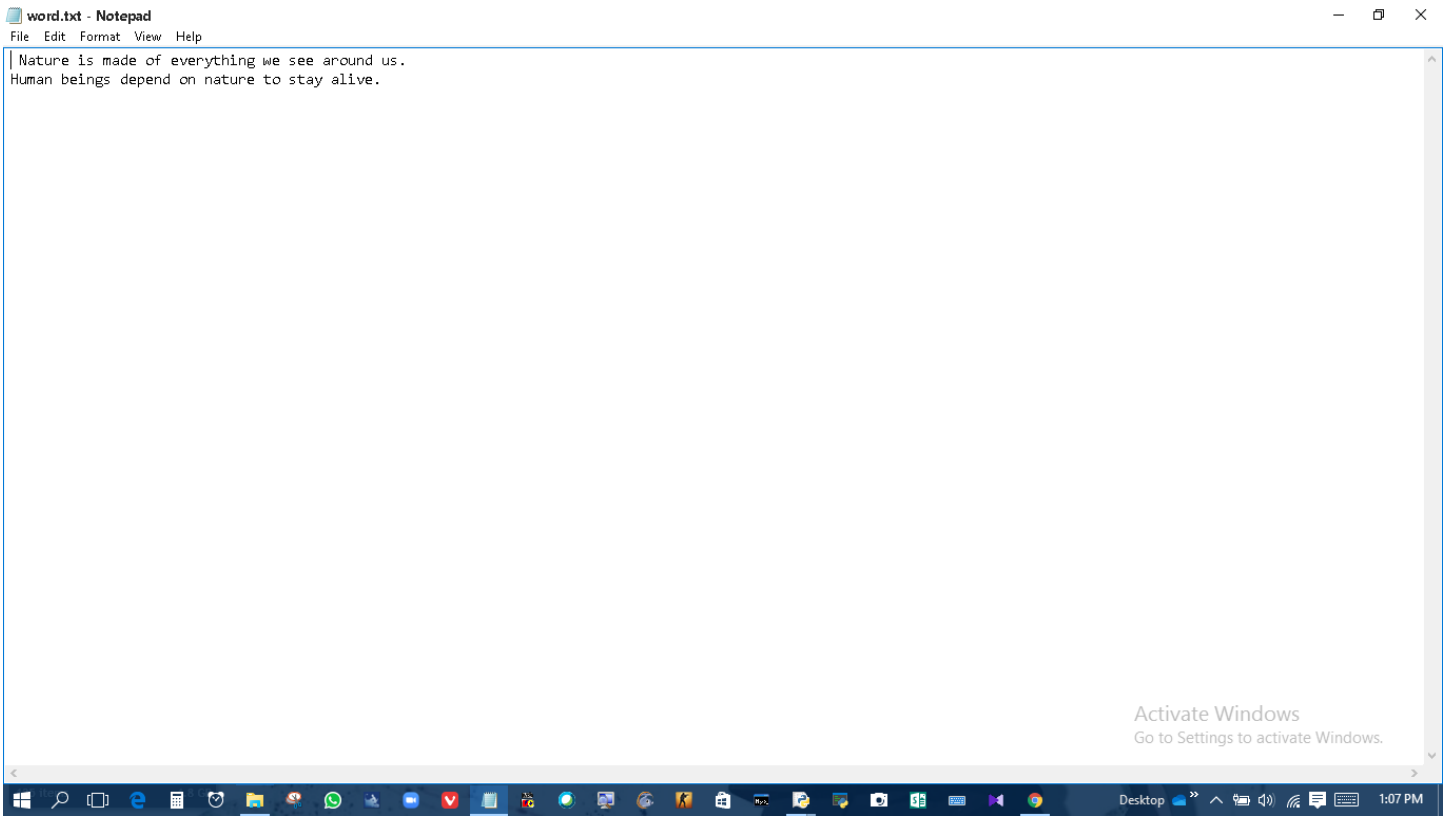
```
Enter the number of elements:5
Enter the element:S
Enter the value:A
Enter the element:SA
Enter the value:AS
Enter the element:AS
Enter the value:AAS
Enter the element:ASS
Enter the value:AAS
Enter the element:FF
Enter the value:DDF
Enter the key:S
The given key exists
```

26.
INPUT:

```
#Read a text file line by line and display each word separated by a #
def create():
    f1=open("word.txt","w")
    f1.write(" Nature is made of everything we see around us.\nHuman beings depend on nature to stay alive.")
    f1.close()
def disp():
    f1=open("word.txt")
    w=f1.readlines()
    for i in w:
        words=i.split()
        for a in words:
            print(a+'#',end="")
        print("")
    f1.close()

create()
disp()
```

OUTPUT:

```
============= RESTART: C:\Users\computer\Desktop\▄▬▀▄▀▬▬\tote.py =============
Nature#is#made#of#everything#we#see#around#us.#
Human#beings#depend#on#nature#to#stay#alive.#
>>>
```

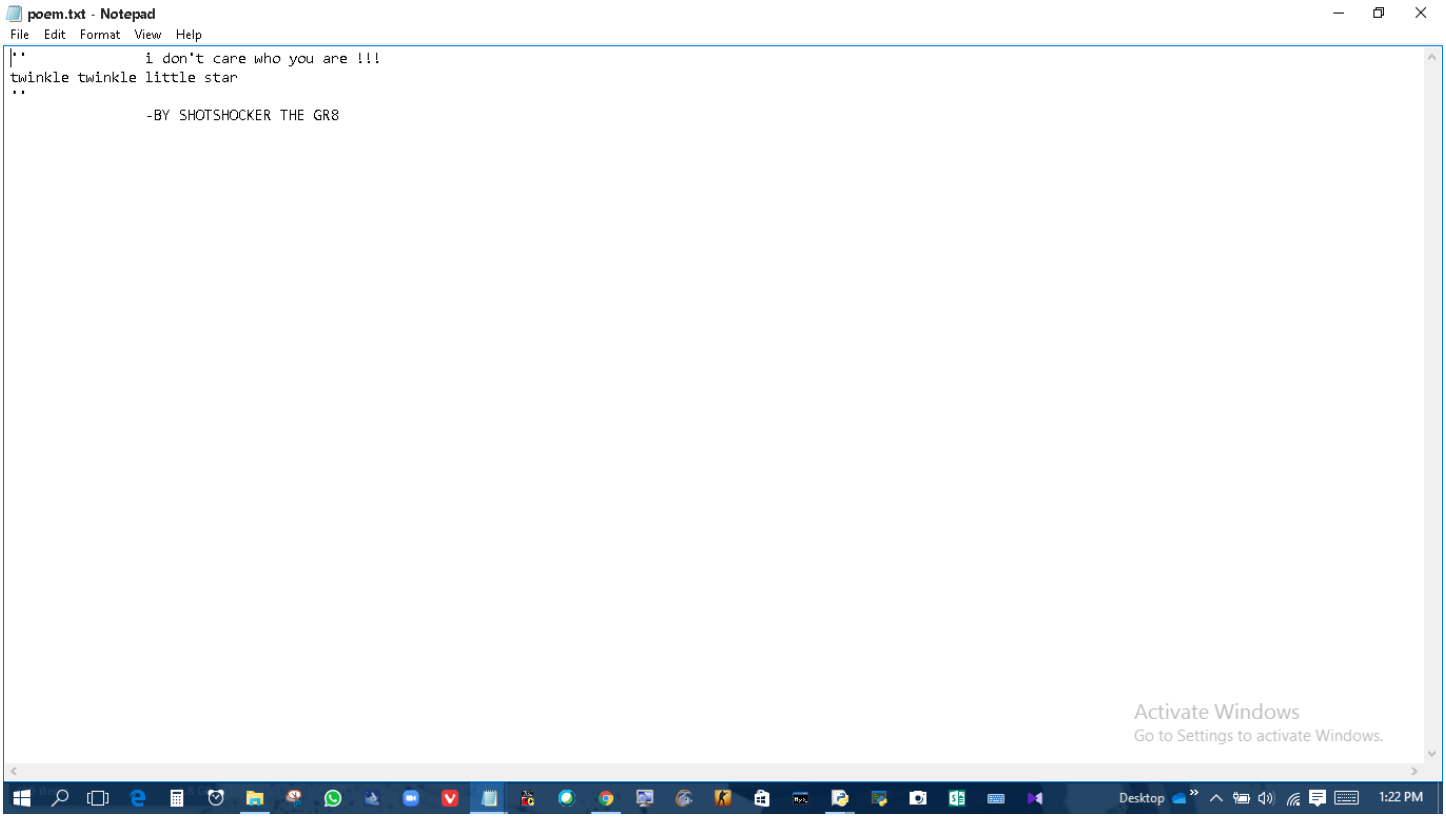


27.
INPUT :

```
#Read a text file and display the number of vowels/ consonants/ uppercase/ lowercase characters in the file.
n=str(input("ENTER FILE NAME\t:"))
f1=open(n,"r")
w=f1.readlines()
CONC=0
UPP=0
VOW=0
LOW=0
for i in w:
   for j in i:
      if j in "AEIOUaeiou" :
         VOW+=1
      elif j in "QWRTYPSDFGHJKLZXCVBNMqwrtypsdfghjklzxcvbnm" :
         CONC+=1
   for k in i:
      if k.isupper()==True :
         UPP+=1
      elif k.islower()==True :
         LOW+=1
print("NO.OF :\n\tVOWELS\t:",VOW,"\n\tCONSONANTS\t:",CONC,"\n\tUPPERCASE
CHARACTERS\t:",UPP,"\n\tLOWERCASE CHARACTERS\t:",LOW)
```

OUTPUT:

```
============= RESTART: C:\Users\user13\Desktop\[illegible]\sse.py =============
ENTER FILE NAME    :poem.txt
NO.OF :
   VOWELS    : 22
   CONSONANTS    : 41
   UPPERCASE CHARACTERS    : 21
   LOWERCASE CHARACTERS    : 42
>>>
```

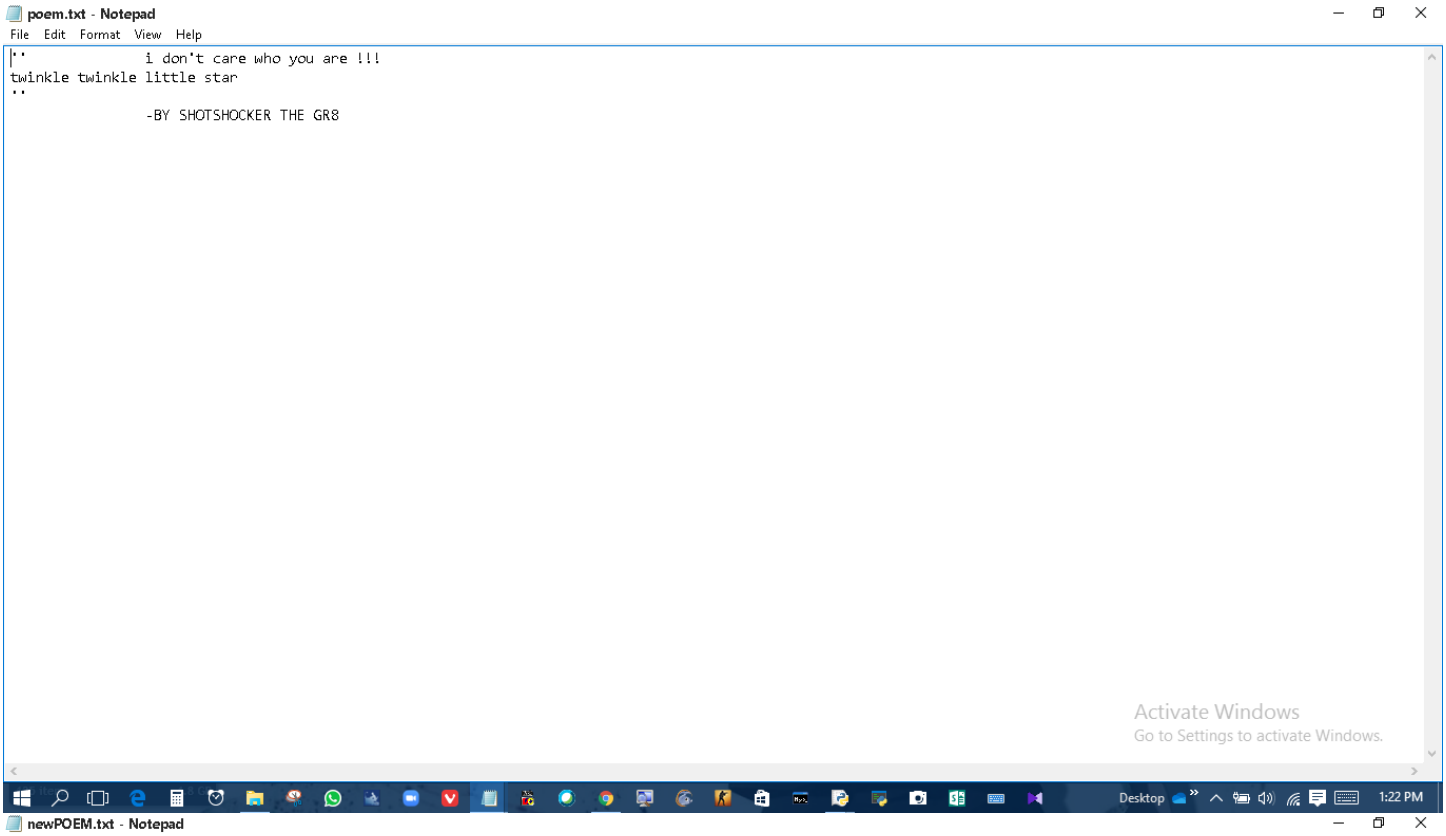

poem.txt - Notepad
File Edit Format View Help
'' i don't care who you are !!!
twinkle twinkle little star
''
-BY SHOTSHOCKER THE GR8
Activate Windows
Go to Settings to activate Windows.
Desktop
1:22 PM

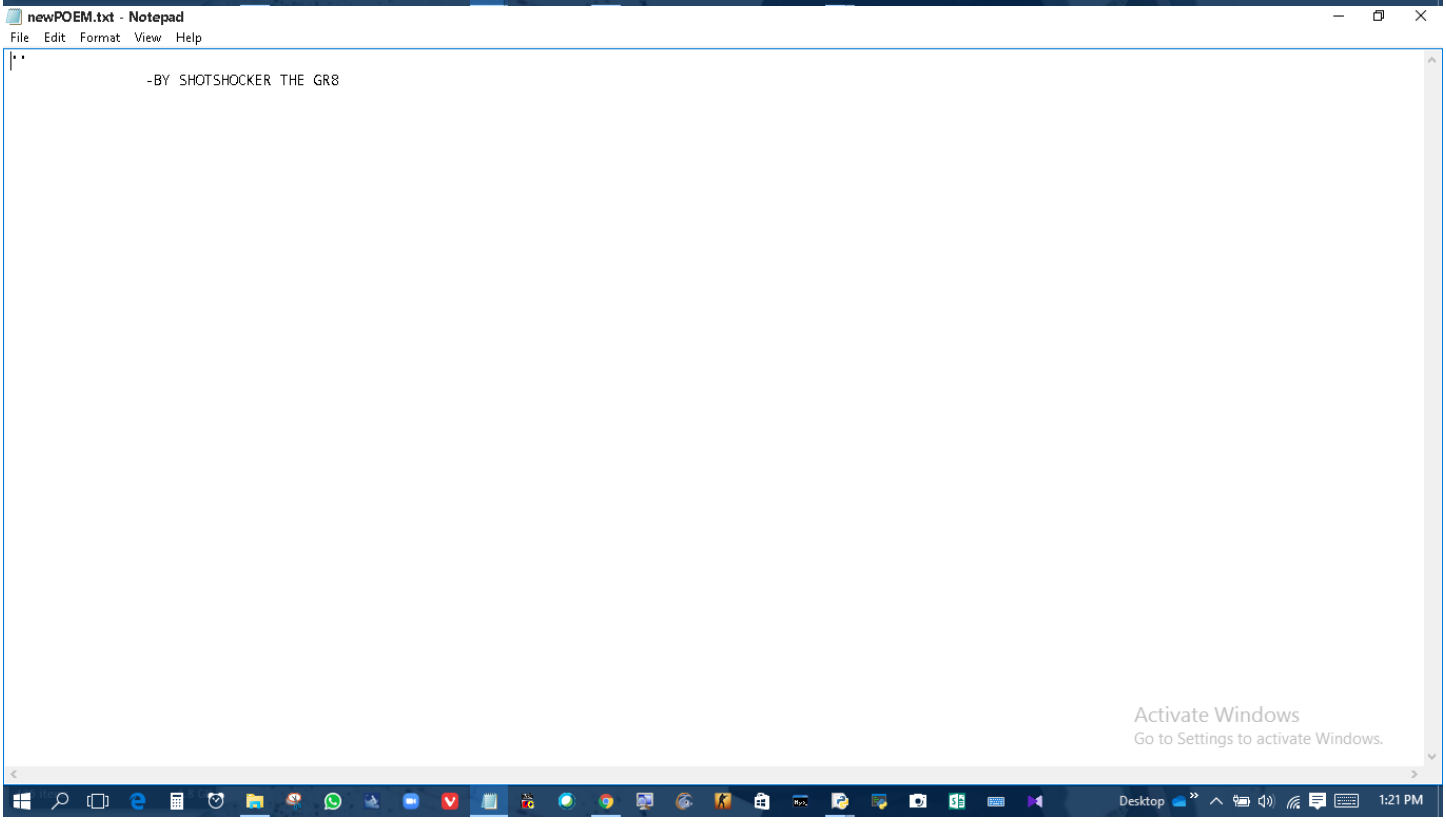
28.
INPUT:

```
#Write a program to remove all the lines that contain the character 'a' in a file and write it to another file.
def displayNotA():
    f=open("poem.txt","r")
    f1=open("newPOEM.txt","w")
    while True:
        line=f.readline()
        if line=='':
            break
        elif 'a' not in line:
            f1.write(line)
    f.close()
    f1.close()

displayNotA()
print("data copied successfully")
```

OUTPUT:

```
============= RESTART: C:\Users\computer\Desktop\[illegible]\tote.py =============
data copied successfully
>>>
```


poem.txt - Notepad
File Edit Format View Help
'' i don't care who you are !!!
twinkle twinkle little star
''
-BY SHOTSHOCKER THE GR8
Activate Windows
Go to Settings to activate Windows.
Desktop
1:22 PM


newPOEM.txt - Notepad
File Edit Format View Help
''
-BY SHOTSHOCKER THE GR8
Activate Windows
Go to Settings to activate Windows.
Desktop
1:21 PM

29.
INPUT:

```
#Create a binary file 'result' with roll number, name and marks. Dispaly all details. Input a roll number and update the marks. Search for a given roll number and display the name, if not found display appropriate message.
import pickle
def create():
    result=[]
    n=int(input("enter number of records "))
    for i in range(0,n):
        rollno=int(input("enter roll number "))
        name=input("enter name of student ")
        marks=int(input("enter marks "))
        data=[rollno,name,marks]
        result.append(data)
    f=open("result.dat",'wb')
    pickle.dump(result,f)
    f.close()

def disp():
    print("[ROLL NO. | NAME | MARKS]")
    f=open("result.dat",'rb')
    result=pickle.load(f)
    for r in result:
        print(r)
    f.close()

def update():
    f=open("result.dat",'rb+')
    result=pickle.load(f)
    while True:
        k=int(input("enter roll number "))
        q=0
        for r in result:
            if r[0]==k:
                r[2]=int(input("enter new marks "))
                q+=1
                print(q)
                break
        if q==0:
            print("not valid roll number")
        h=input("enter Y for updation else enter any key")
        if h=='Y' or h=='y':
            break
    f.seek(0)
    pickle.dump(result,f)
    f.close()
def search():
    a=int(input("Enter the Roll Number"))
    f=open("result.dat",'rb+')
    record=pickle.load(f)
```

```
    c=0
    for b in record:
        if a==b[0]:
            print("The requsted data of the student is:\n")
            print("[ROLL NO. | NAME | MARKS]")
            print(b)
            c+=1
    if c==0:
        print("The student was not found in our database please consider entering a correct number")
        update()

ans='y'
while(ans=='y' or ans=='Y'):
    print("1.create student data file")
    print("2.display student data file")
    print("3.update marks")
    print("4.Search for a student record")
    c=int(input("enter your choice"))
    if(c==1):
        create()
        print("\n")
    elif(c==2):
        disp()
        print("\n")
    elif(c==3):
        update()
        print("\n")
    elif c==4:
        search()
        print("\n")
    ans=input("do you want menu again (y/n)")
```

OUTPUT :

```
================ RESTART: C:\Users\computer\Desktop\Q29 (1).py ================
1.create student data file
2.display student data file
3.update marks
4.Search for a student record
enter your choice1
enter number of records 3
enter roll number 1
enter name of student sid
enter marks 100
enter roll number 2
enter name of student arjun
enter marks 100
enter roll number 3
enter name of student jyotsana
enter marks 99
```

do you want menu again (y/n)y
1.create student data file
2.display student data file
3.update marks
4.Search for a student record
enter your choice2
[ROLL NO. | NAME | MARKS]
[1, 'sid', 100]
[2, 'arjun', 100]
[3, 'jyotsana', 99]

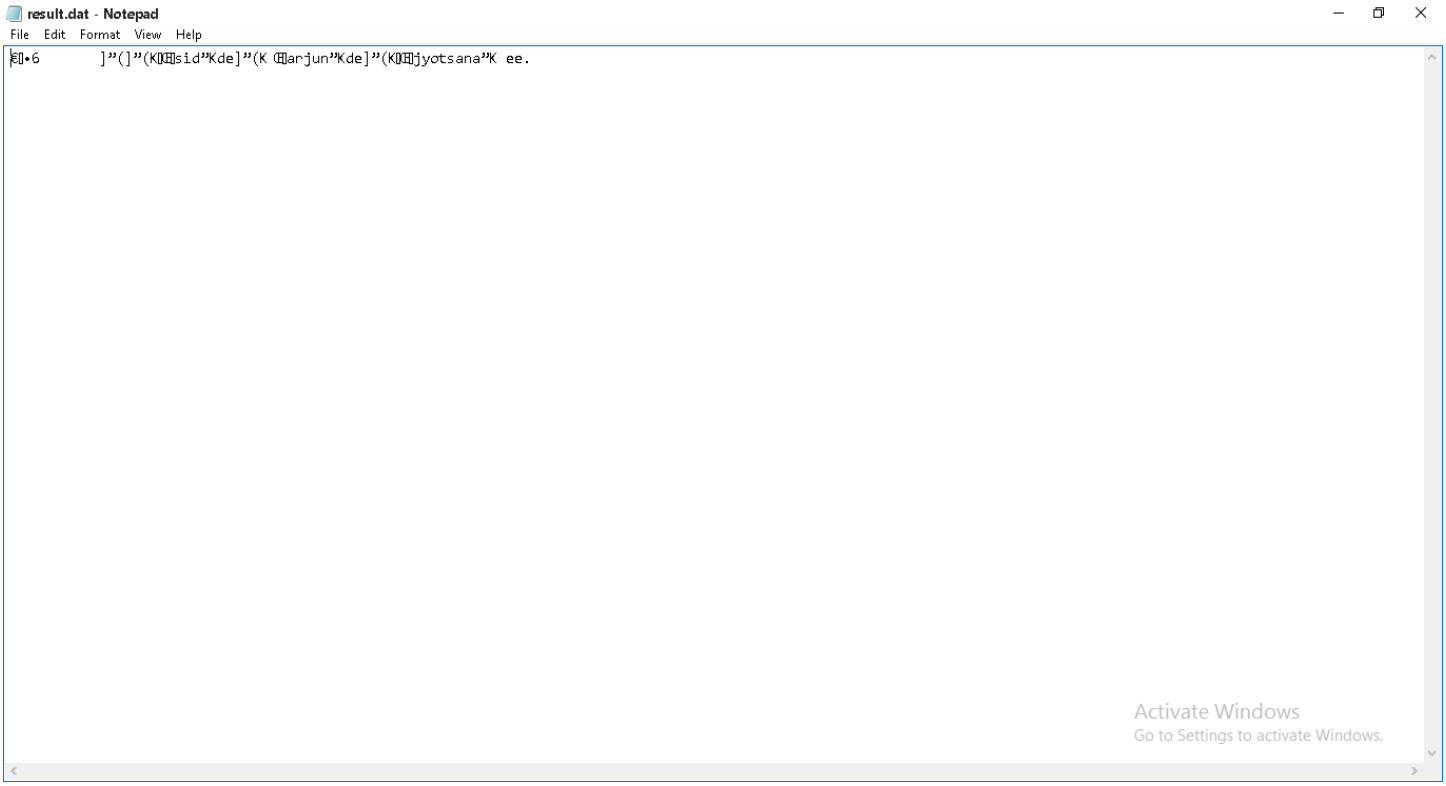
do you want menu again (y/n)y
1.create student data file
2.display student data file
3.update marks
4.Search for a student record
enter your choice3
enter roll number 3
enter new marks 0
1
enter Y for updation else enter any keyY

do you want menu again (y/n)y
1.create student data file
2.display student data file
3.update marks
4.Search for a student record
enter your choice2
[ROLL NO. | NAME | MARKS]
[1, 'sid', 100]
[2, 'arjun', 100]
[3, 'jyotsana', 0]

do you want menu again (y/n)y
1.create student data file
2.display student data file
3.update marks
4.Search for a student record
enter your choice4
Enter the Roll Number2
The requsted data of the student is:
[ROLL NO. | NAME | MARKS]
[2, 'arjun', 100]

do you want menu again (y/n)n

>>>


result.dat - Notepad
File Edit Format View Help
]”(]”(KD田sid”Kde]”(K 田arjun”Kde]”(KD田jyotsana”K ee.
Activate Windows
Go to Settings to activate Windows.

30.
INPUT:

```
#Write a Python program to implement a stack using a list data-structure .Write push() pop() and display() functions and call them in main program.
Stack= []
top = -1
def push():
   global top
   choice = 'Y'
   while choice=='y' or choice=='Y':
      element = input("Enter the value to be added into the Stack :")
      Stack.append(element)
      top =top+ 1
      print("Do you want to add more elements<y/n> :")
      choice=input("Enter your choice :")
def display():
   if Stack==[]:
      print("Stack is empty")
   else:
      print("The Stack elements are :")
      i = top
      while (i >= 0):
         print(Stack[i])
         i =i - 1
def pop():
   global top
   if Stack==[]:
      print("Stack is empty")
   else:
      elem=Stack.pop()
      top = top-1
      print("Element deleted from the list is :",elem)

push()
display()
pop()
display()
```

OUTPUT:

```
================== RESTART: C:\Users\computer\Desktop\Q35.py ==================
Enter the value to be added into the Stack :12
Do you want to add more elements<y/n> :
Enter your choice :y
Enter the value to be added into the Stack :1
Do you want to add more elements<y/n> :
Enter your choice :y
Enter the value to be added into the Stack :1
Do you want to add more elements<y/n> :
Enter your choice :y
```

Enter the value to be added into the Stack :12
Do you want to add more elements<y/n> :
Enter your choice :y
Enter the value to be added into the Stack :93268476
Do you want to add more elements<y/n> :
Enter your choice :n
The Stack elements are :
93268476
12
1
1
12
Element deleted from the list is : 93268476
The Stack elements are :
12
1
1
12
>>>

31.
INPUT:

#Write a menu driven program (i)to create binary file "employee" (ii) Enter details such as id name designation and department of employees (iii) Display details of all employees (iv) Search detail of an employee on the basis of id (v)Update designation of an employee.

```
import pickle as p

n=1

print("THIS IS employee.dat BINARY FILE OPERATING PROGRAM")

def two():
    f=open("employee.dat","wb+")
    k=int(input("ENTER NO. OF ROWS\t:"))
    while k>0:
        a1=input("ID\t:")
        a2=str(input("NAME\t:"))
        a3=str(input("DEPARTMENT\t:"))
        a4=str(input("DESIGNATION\t:"))
        emp={"ID":a1,"NAME":a2,"DEPARTMENT":a3,"DESIGNATION":a4}
        p.dump(emp,f)
        f.flush()
        k-=1
    f.close()
def three():
    f=open("employee.dat","rb")
    try :
        while True :
            empd=p.load(f)
            print(empd)
    except EOFError:
        f.close()
def four():
    iid=input("ID\t:")
    f=open("employee.dat","rb")
    try :
        while True :
            empd=p.load(f)
            if empd["ID"]==str(iid) :
                print(empd)
    except EOFError:
        f.close()
def five():
    iid=input("ID\t:")
    f=open("employee.dat","rb")
    ee=[]
    try :
        while True :
            empd=p.load(f)
            if str(iid)==empd["ID"]:
```

```
                idc=str(input("DESIGNATION\t:"))
                empd["DESIGNATION"]=idc
            ee.append(empd)
    except EOFError:
        f.close()
    f=open("employee.dat","wb+")
    for j in ee:
        p.dump(j,f)
    f.close()
def q():
    print("QUERY EXECUTED!!!!")

while n>0:
    c=int(input("MENU\t:\n\t(1)To create binary file “employee” \n\t(2) Enter details such as id name designation and department of employees \n\t(3) Display details of all employees \n\t(4) Search detail of an employee on the basis of id. \n\t(5)Update designation of an employee.\n\t(6)CLOSE THE PROGRAM\n\nENTER THE NUMBER OF QUERY\t:\t"))
    if c==1:
        f=open("employee.dat","wb+")
        f.close()
        q()
    elif c== 2:
        two()
        q()
    elif c== 3:
        three()
        q()
    elif c== 4:
        four()
        q()
    elif c== 5:
        five()
        q()
    elif c== 6:
        n=0
        q()
    else :
        print("ERROR!!!!")
```

OUTPUT:

```
============== RESTART: C:/Users/computer/Desktop/[illegible]/krk.py =============
THIS IS employee.dat BINARY FILE OPERATING PROGRAM
MENU  :
        (1)To create binary file “employee”
        (2) Enter details such as id name designation and department of employees
        (3) Display details of all employees
        (4) Search detail of an employee on the basis of id.
        (5)Update designation of an employee.
        (6)CLOSE THE PROGRAM
```

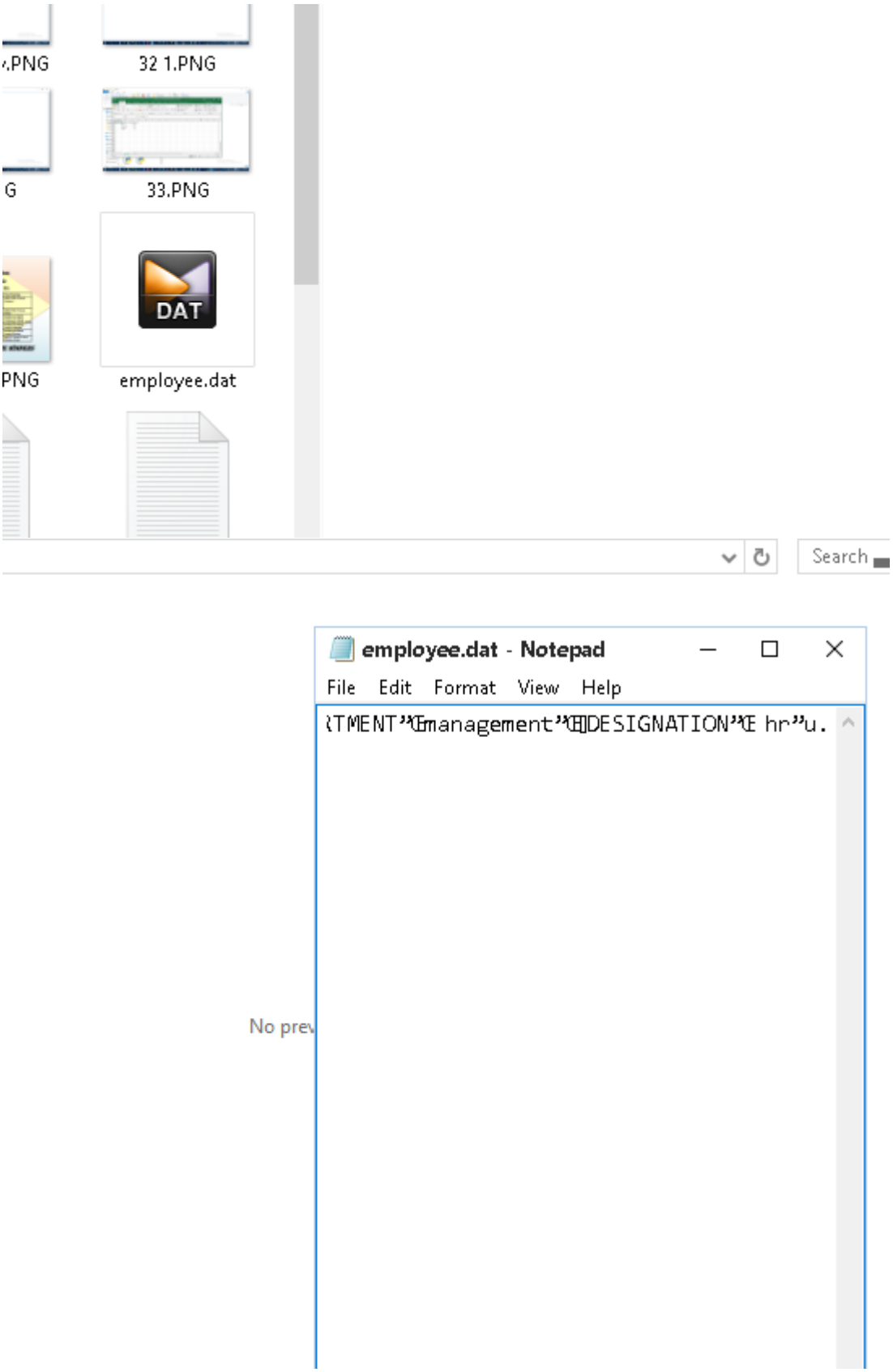
```
ENTER THE NUMBER OF QUERY:          1
QUERY EXECUTED!!!!
MENU  :
        (1)To create binary file “employee”
        (2) Enter details such as id name designation and department of employees
        (3) Display details of all employees
        (4) Search detail of an employee on the basis of id.
        (5)Update designation of an employee.
        (6)CLOSE THE PROGRAM

ENTER THE NUMBER OF QUERY:          2
ENTER NO. OF ROWS    :3
ID        :1
NAME  :ak
DEPARTMENT   :management
DESIGNATION   :hr
ID        :2
NAME  :surya
DEPARTMENT   :sales
DESIGNATION   :supplier A
ID        :3
NAME  :ryan
DEPARTMENT   :advertising
DESIGNATION   :leader
QUERY EXECUTED!!!!
MENU  :
        (1)To create binary file “employee”
        (2) Enter details such as id name designation and department of employees
        (3) Display details of all employees
        (4) Search detail of an employee on the basis of id.
        (5)Update designation of an employee.
        (6)CLOSE THE PROGRAM

ENTER THE NUMBER OF QUERY:          3
{'ID': '1', 'NAME': 'ak', 'DEPARTMENT': 'management', 'DESIGNATION': 'hr'}
{'ID': '2', 'NAME': 'surya', 'DEPARTMENT': 'sales', 'DESIGNATION': 'supplier A'}
{'ID': '3', 'NAME': 'ryan', 'DEPARTMENT': 'advertising', 'DESIGNATION': 'leader'}
QUERY EXECUTED!!!!
MENU  :
        (1)To create binary file “employee”
        (2) Enter details such as id name designation and department of employees
        (3) Display details of all employees
        (4) Search detail of an employee on the basis of id.
        (5)Update designation of an employee.
        (6)CLOSE THE PROGRAM

ENTER THE NUMBER OF QUERY:          4
ID        :2
{'ID': '2', 'NAME': 'surya', 'DEPARTMENT': 'sales', 'DESIGNATION': 'supplier A'}
QUERY EXECUTED!!!!
MENU  :
```

(1)To create binary file “employee”
(2) Enter details such as id name designation and department of employees
(3) Display details of all employees
(4) Search detail of an employee on the basis of id.
(5)Update designation of an employee.
(6)CLOSE THE PROGRAM

ENTER THE NUMBER OF QUERY: 5
ID :2
DESIGNATION :leader
QUERY EXECUTED!!!!
MENU :
(1)To create binary file “employee”
(2) Enter details such as id name designation and department of employees
(3) Display details of all employees
(4) Search detail of an employee on the basis of id.
(5)Update designation of an employee.
(6)CLOSE THE PROGRAM

ENTER THE NUMBER OF QUERY: 3
{'ID': '1', 'NAME': 'ak', 'DEPARTMENT': 'management', 'DESIGNATION': 'hr'}
{'ID': '2', 'NAME': 'surya', 'DEPARTMENT': 'sales', 'DESIGNATION': 'leader'}
{'ID': '3', 'NAME': 'ryan', 'DEPARTMENT': 'advertising', 'DESIGNATION': 'leader'}
QUERY EXECUTED!!!!
MENU :
(1)To create binary file “employee”
(2) Enter details such as id name designation and department of employees
(3) Display details of all employees
(4) Search detail of an employee on the basis of id.
(5)Update designation of an employee.
(6)CLOSE THE PROGRAM

ENTER THE NUMBER OF QUERY: 6
QUERY EXECUTED!!!!
>>>


.PNG
32 1.PNG
G
33.PNG
DAT
PNG
employee.dat
Search
employee.dat - Notepad
File Edit Format View Help
TMENT"Emanagement"DESIGNATION"E hr"u.
No prev

32.
INPUT:

#Write a menu driven program to (i) create a text file poem.txt (ii)display contents of file poem.txt (iii) function to count words starting with alphabet 'w'(iv) function to calculate size of text file poem.txt (v) function to count total number of alphabets(vi)function to copy text in new file new.txt after converting text in upper case.

```
def six():
    f=open("poem.txt",'r+')
    cont=f.read()
    d=open('new.txt','w+')
    cont=cont.upper()
    for i in cont :
        d.write(i)
    d.close()
    f.close()
def two():
    f=open("poem.txt",'r+')
    cont=f.read()
    print(cont)
    f.close()
def three():
    f=open("poem.txt",'r+')
    count=0
    cont=f.read()
    j=list('~!@#$%^&*()_+{-}|:\"<>?.,\';][\`')
    for i in cont.split():
        for k in j:
            i.replace(k,'')
        if 'w' in i:
            if 'w'==i[0]:
                count+=1
    print(count)
    f.close()
def four():
    f=open("poem.txt",'r+')
    cont=f.read()
    print(len(cont))
    f.close()
def five():
    count=0
    f=open("poem.txt",'r+')
    cont=f.read()
    for i in cont.split():
        j=list('~!@#$%^&*()_+{}|:\"<>?.,-\';][\`')
        print(j)
        for k in j:
            oni=str(i)
            oni=oni.replace(k,'')
        print(oni)
        count+=len(oni)
    print(count)
```

```
    f.close()
n=1
print("THIS IS MENU BASED PROGRAM FOR OPERATING TEXT FILE")
while n>0:
    m=int(input("MENU\t:\n\t1.create a text file poem.txt\n\t2.display contents of file poem.txt\n\t3.to count words starting with alphabet \‘w\’\n\t4.to calculate size of text file poem.txt\n\t5.to count total number of alphabets\n\t6.to copy text in new file new.txt after converting text in upper case.\n\t7.close program\n\t\tENTER THE OPTION >>>"))
    if m==1:
        f=open("poem.txt",'w+')
        print("FILE CREATED")
        x=1
        while x>0:
            w=str(input("ENTER LINE(IF WANT TO STOP THEN PRESS ENTER) :"))
            if w=='':
                x=0
            else :
                f.write(w+"\n")
        f.close()
    elif m==2:
        two()
    elif m==3:
        three()
    elif m==4:
        four()
    elif m==5:
        five()
    elif m==6:
        six()
    elif m==7:
        n=0
    else :
        print('ERROR')
```

OUTPUT:

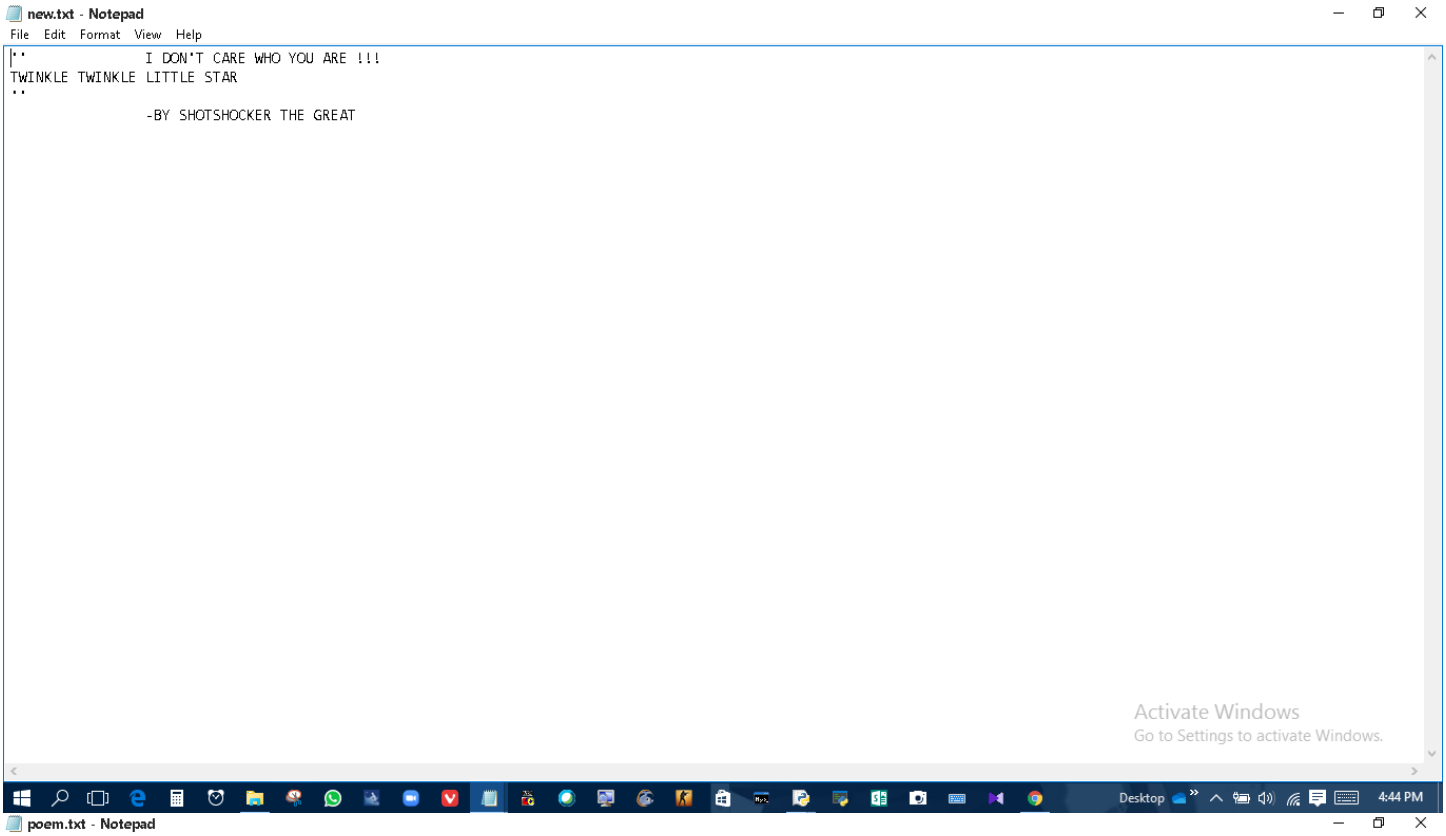
```
========== RESTART: C:/Users/computer/Desktop/[illegible]
/tatoo.py ==========
THIS IS MENU BASED PROGRAM FOR OPERATING TEXT FILE
MENU  :
        1.create a text file poem.txt
        2.display contents of file poem.txt
        3.to count words starting with alphabet \‘w\’
        4.to calculate size of text file poem.txt
        5.to count total number of alphabets
        6.to copy text in new file new.txt after converting text in upper case.
        7.close program
                ENTER THE OPTION >>>1
FILE CREATED
ENTER LINE(IF WANT TO STOP THEN PRESS ENTER) :''            i don't care who you are !!!
ENTER LINE(IF WANT TO STOP THEN PRESS ENTER) :twinkle twinkle little star
```

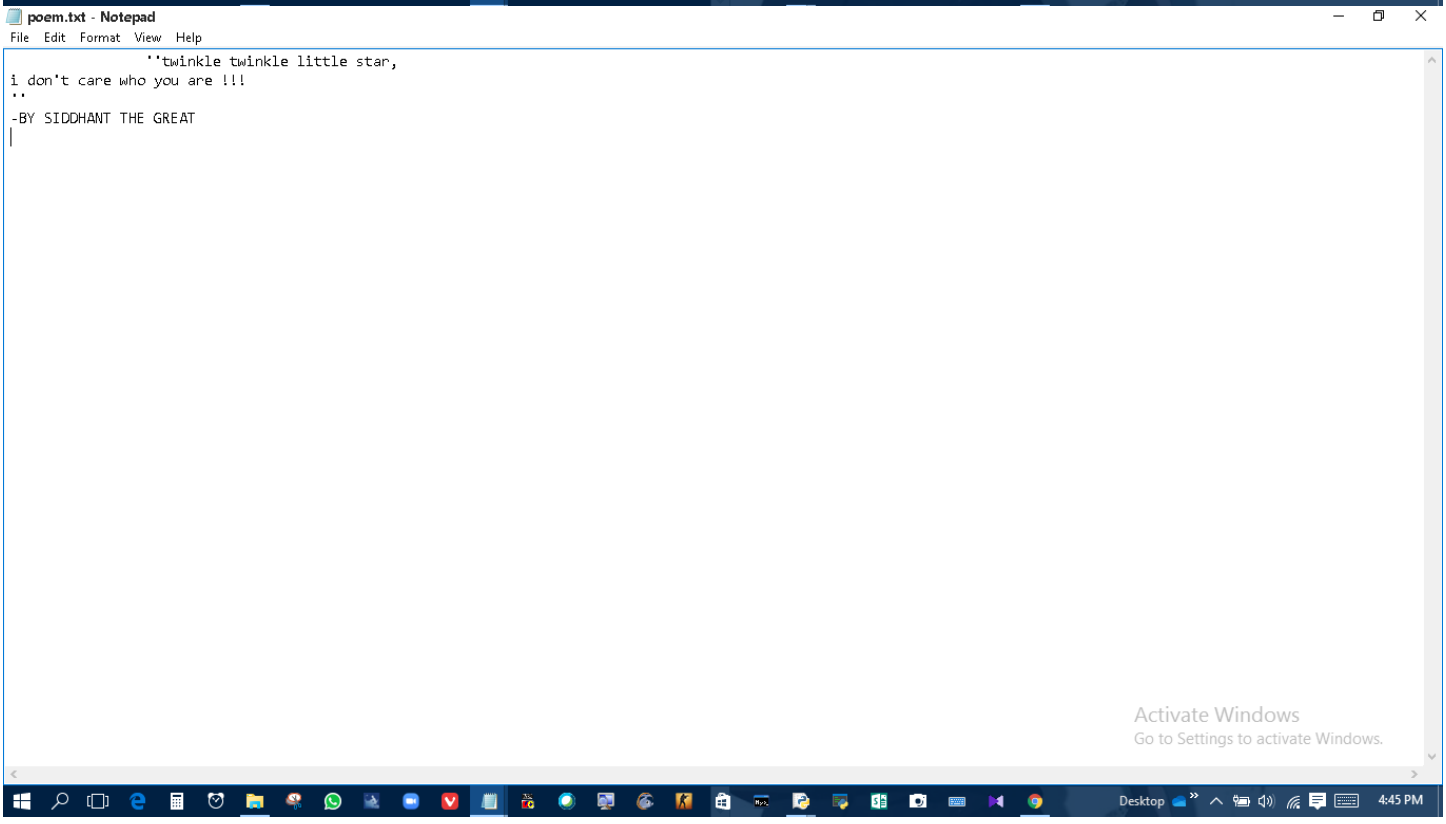
```
ENTER LINE(IF WANT TO STOP THEN PRESS ENTER) :''
ENTER LINE(IF WANT TO STOP THEN PRESS ENTER) :                -BY SHOTSHOCKER THE GREAT
ENTER LINE(IF WANT TO STOP THEN PRESS ENTER) :
MENU  :
        1.create a text file poem.txt
        2.display contents of file poem.txt
        3.to count words starting with alphabet \'w\'
        4.to calculate size of text file poem.txt
        5.to count total number of alphabets
        6.to copy text in new file new.txt after converting text in upper case.
        7.close program
                ENTER THE OPTION >>>2
''              i don't care who you are !!!
twinkle twinkle little star
''
                -BY SHOTSHOCKER THE GREAT

MENU  :
        1.create a text file poem.txt
        2.display contents of file poem.txt
        3.to count words starting with alphabet \'w\'
        4.to calculate size of text file poem.txt
        5.to count total number of alphabets
        6.to copy text in new file new.txt after converting text in upper case.
        7.close program
                ENTER THE OPTION >>>3
1
MENU  :
        1.create a text file poem.txt
        2.display contents of file poem.txt
        3.to count words starting with alphabet \'w\'
        4.to calculate size of text file poem.txt
        5.to count total number of alphabets
        6.to copy text in new file new.txt after converting text in upper case.
        7.close program
                ENTER THE OPTION >>>4
92
MENU  :
        1.create a text file poem.txt
        2.display contents of file poem.txt
        3.to count words starting with alphabet \'w\'
        4.to calculate size of text file poem.txt
        5.to count total number of alphabets
        6.to copy text in new file new.txt after converting text in upper case.
        7.close program
                ENTER THE OPTION >>>5
72
MENU  :
        1.create a text file poem.txt
        2.display contents of file poem.txt
        3.to count words starting with alphabet \'w\'
```

4.to calculate size of text file poem.txt
5.to count total number of alphabets
6.to copy text in new file new.txt after converting text in upper case.
7.close program
ENTER THE OPTION >>>6

MENU :
1.create a text file poem.txt
2.display contents of file poem.txt
3.to count words starting with alphabet \'w\'
4.to calculate size of text file poem.txt
5.to count total number of alphabets
6.to copy text in new file new.txt after converting text in upper case.
7.close program
ENTER THE OPTION >>>7

>>>


new.txt - Notepad
File Edit Format View Help
'' I DON'T CARE WHO YOU ARE !!!
TWINKLE TWINKLE LITTLE STAR
''
-BY SHOTSHOCKER THE GREAT
Activate Windows
Go to Settings to activate Windows.
Desktop
4:44 PM


poem.txt - Notepad
File Edit Format View Help
''twinkle twinkle little star,
i don't care who you are !!!
''
-BY SIDDHANT THE GREAT
Activate Windows
Go to Settings to activate Windows.
Desktop
4:45 PM

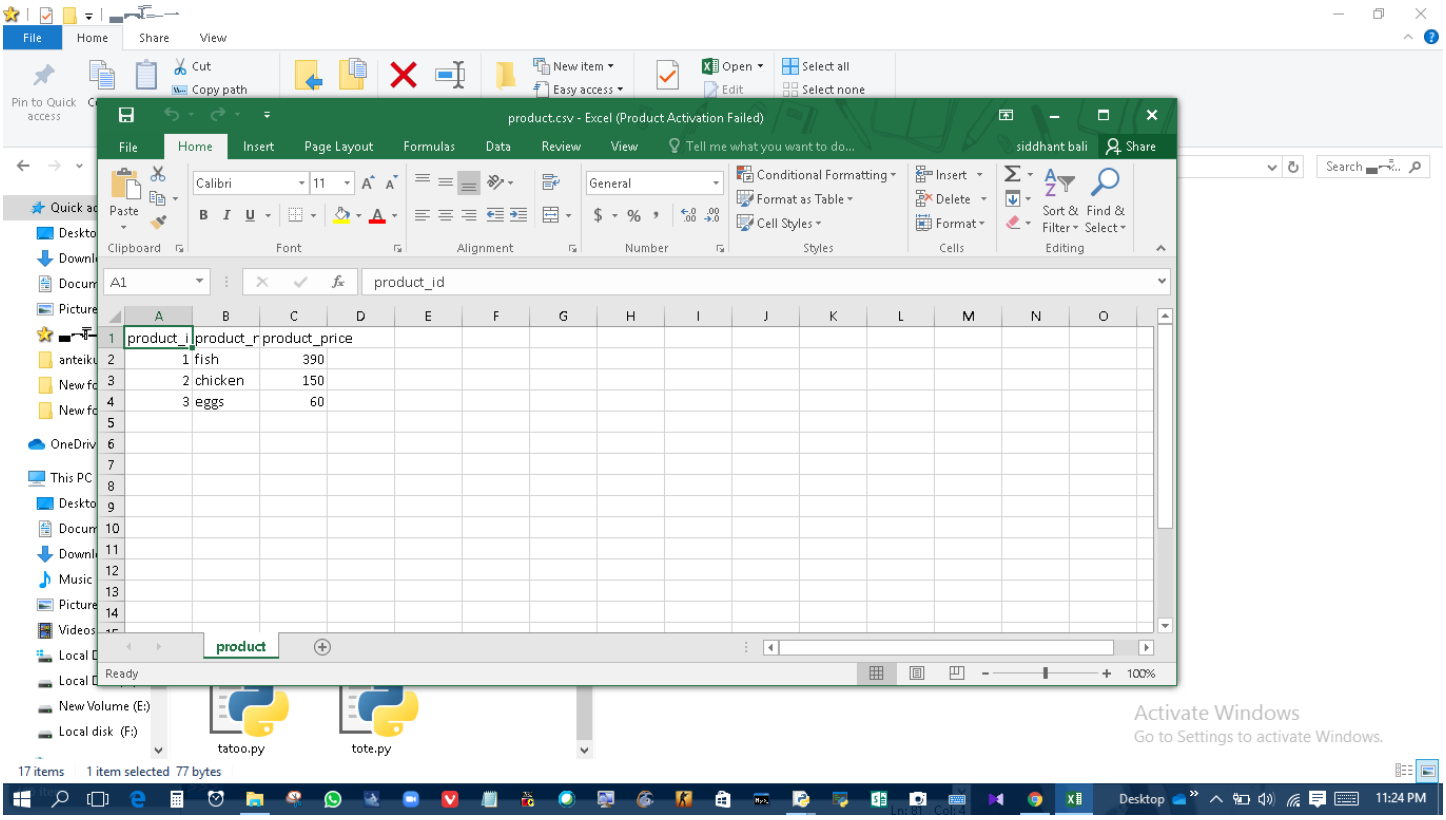
33.
INPUT:

```
# Write a program to create a CSV_file “product.csv”. Enter details such as product_id, Product_name, Product_price .
Display all the product details from file “product.csv”.
import csv
f=open("product.csv",'w',newline='')
print("PRODUCT.CSV FILE CREATED!!!!")
fields=["product_id","product_name","product_price"]
csv.writer(f).writerow(fields)
n=int(input("ENTER NO. ROWS OF DATA TO BE INSERTED    :"))
count=1
l=[]
while n>0:
    print("ROW",count)
    a1=str(input("ENTER    product_id:"))
    a2=str(input("ENTER    product_name:"))
    a3=str(input("ENTER    product_price:"))
    l1=[a1,a2,a3]
    l.append(l1)
    print("DATA INSERTED")
    n-=1
    count+=1
for i in l:
    csv.writer(f).writerow(i)
print("DATA INSERTED IN FILE!!!!")
f.close()
f=open("product.csv",'r')
reader=csv.reader(f)
for i in reader:
    print(i)
print("DATA DISPLAYED!!!!")
f.close()
```

OUTPUT:

```
============== RESTART: C:/Users/computer/Desktop/[illegible]/krk.py =============
PRODUCT.CSV FILE CREATED!!!!
ENTER NO. ROWS OF DATA TO BE INSERTED    :3
ROW 1
ENTER    product_id:1
ENTER    product_name:fish
ENTER    product_price:390
DATA INSERTED
ROW 2
ENTER    product_id:2
ENTER    product_name:chicken
ENTER    product_price:150
DATA INSERTED
ROW 3
ENTER    product_id:3
```

ENTER product_name:eggs
ENTER product_price:60
DATA INSERTED
DATA INSERTED IN FILE!!!!
['product_id', 'product_name', 'product_price']
['1', 'fish', '390']
['2', 'chicken', '150']
['3', 'eggs', '60']
DATA DISPLAYED!!!!
>>>

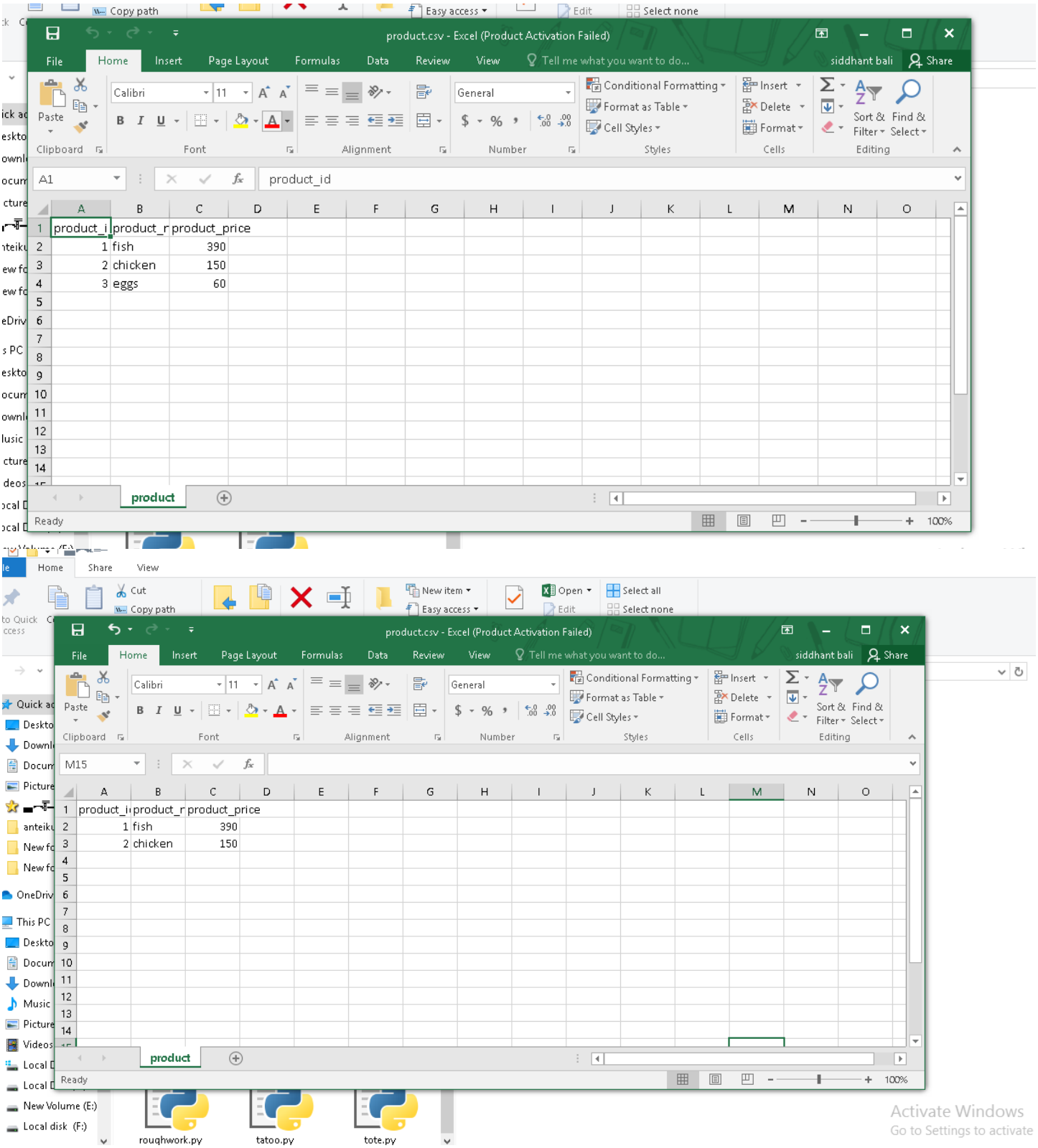


34.
INPUT:

```
#Write program to delete a product detail from the above csv file “product.csv”.
import csv
f=open("product.csv",'r')
iid=str(input("ENTER product_id\t:"))
reader=csv.reader(f)
p=[]
for i in reader:
    if iid==i[0] :
        continue
    p.append(i)
f.close()
print(p)
f=open("product.csv",'w+')
for i in p:
    csv.writer(f).writerow(i)
f.close()
print("DATA DELETED!!!!")
```

OUTPUT:

```
========== RESTART: C:/Users/computer/Desktop/[illegible]/krk.py
==========
ENTER product_id        :3
DATA DELETED!!!!
>>>
```


product.csv - Excel (Product Activation Failed)
File Home Insert Page Layout Formulas Data Review View Tell me what you want to do... siddhant bali Share
A1 product_id
product_id product_name product_price
1 fish 390
2 chicken 150
3 eggs 60
product
Ready
100%
product.csv - Excel (Product Activation Failed)
M15
product_id product_name product_price
1 fish 390
2 chicken 150
product
Ready
100%
roughwork.py
tatoo.py
tote.py
Activate Windows
Go to Settings to activate

35.
INPUT:

```
#Write a menu driven program to create connectivity with a table ‘student’ already created in a database ‘school’ under MySql. (i)Write function to insert data as admission number and name of student in above table ‘student’. (ii)Write function to display data from table ‘student’. (iii)Write function to change admission number of a student. (iv)Write a function to delete detail of a student on the basis of admission number.
import mysql.connector
mycon=mysql.connector.connect(host="localhost",user="root",passwd="IIT-JEE",database="school")
if mycon.is_connected:
   print("MYSQL CONNECTED SUCCESSFULLY!!!!!")
cursor=mycon.cursor()
def insert():
   a=int(input("Enter the admission number"))
   b=str(input("Enter the name of student"))
   st="insert into student(admission_number,Name_of_student) values({},'{}')".format(a,b)
   cursor.execute(st)
   print("Data inserted successfully")
   mycon.commit()
def view():
   st="select * from student"
   cursor.execute(st)
   data=cursor.fetchall()
   print("Admission number\tName of student\t")
   for i in data:
      for j in i:
         print(j,end="\t\t\t")
      print()
   print("Data shown successfully")
   mycon.commit()
def update():
   a=str(input("Enter the student name="))
   b=int(input("Enter the new admission number of student="))
   st="update student set Admission_number={} where Name_of_student='{}'".format(b,a)
   cursor.execute(st)
   print("Data updated successfully")
   mycon.commit()
def delete():
   a=int(input("Enter the admission number="))
   st="delete from student where Admission_number={}".format(a,)
   cursor.execute(st)
   print("Data deleted successfully")
   mycon.commit()
b="yes"
while b=="yes":
   print("What do you want to do....\n1.Insert value in the table\n2.Details of student\n3.update student admission number\n4.Delete records of a student")
   a=int(input("ENTER YOUR CHOICE="))
   if a==1:
      insert()
   elif a==2:
```

```
        view()
    elif a==3:
        update()
    elif a==4:
        delete()
    else:
        print("You have entered a wrong value")
    c=str(input("Do you want to continue?"))
    if c not in ["yes","YES","Yes"]:
        b="F"
        print("THANKS FOR USING!!!!")
```

OUTPUT(PYTHON WINDOW):

```
================== RESTART: C:\Users\computer\Desktop\Q35.py ==================
MYSQL CONNECTED SUCCESSFULLY!!!!!
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=1
Enter the admission number1
Enter the name of studentanuj
Data inserted successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=1
Enter the admission number2
Enter the name of studentsid
Data inserted successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=1
Enter the admission number3
Enter the name of studentjyoti
Data inserted successfully
Do you want to continue?YES
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=1
```

Enter the admission number4
Enter the name of studentmurli k bairagi
Data inserted successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=2

Admission number	Name of student
1	anuj
2	sid
3	jyoti
4	murli k bairagi

Data shown successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=3
Enter the student name=sid
Enter the new admission number of student=4567
Data updated successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=2

Admission number	Name of student
1	anuj
4567	sid
3	jyoti
4	murli k bairagi

Data shown successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=4
Enter the admission number=1
Data deleted successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table

2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=3
Enter the student name=sid
Enter the new admission number of student=1
Data updated successfully
Do you want to continue?yes
What do you want to do....
1.Insert value in the table
2.Details of student
3.update student admission number
4.Delete records of a student
ENTER YOUR CHOICE=2

Admission number	Name of student
1	sid
3	jyoti
4	murli k bairagi

Data shown successfully
Do you want to continue?NO
THANKS FOR USING!!!!
>>>

OUTPUT(SQL WINDOW):

Enter password: *****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 15
Server version: 8.0.21 MySQL Community Server - GPL**

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| anteiku_cafe       |
| information_schema |
| mgs_cs_12a         |
| mysql              |
| office             |
| performance_schema |
| sakila             |
| school             |
| sys                |
```

```
| world             |
+--------------------+
10 rows in set (0.12 sec)

mysql> USE SCHOOL;
Database changed
mysql> SHOW TABLES;
+-----------------+
| Tables_in_school |
+-----------------+
| student         |
+-----------------+
1 row in set (0.13 sec)

mysql> SELECT * FROM STUDENT;
+------------------+-----------------+
| admission_number | Name_of_student |
+------------------+-----------------+
|              1 | sid             |
|              3 | jyoti           |
|              4 | murli k bairagi |
+------------------+-----------------+
3 rows in set (0.00 sec)

mysql>
```

36.
INPUT:

```
#Write a menu driven program (i)To create a stack of integers.(ii) Display all the values from the stack.(iii) Delete an element from the stack.(iv) Display total number of values stored in a stack.
s=[]
n=1
print("THIS IS MENU DRIVEN PROGRAM FOR OPERATING STACK")
while n>0:
    c=int(input("MENU\t:\n\n\t1.PUSH INTEGER ELEMENT\n\t2.DISPLAY STACK\n\t3.POP ELEMENT\n\t4.DISPLAY NO.OF ELEMENTS\n\t5.CLOSE PROGRAM\n\t\tENTER THE OPTION >>>"))
    if c==3:
        s.pop()
    elif c==1:
        b=int(input("ENTER THE ELEMENT :"))
        s.append(b)
    elif c==2:
        print("\nSTACK\n")
        s1=reversed(s)
        for i in s1:
            print('\t',i)
    elif c==4:
        print("NO. OF ELEMENTS IN STACK\t:\t",len(s))
    elif c==5:
        n=0
    else :
        print("ERROR")
```

OUTPUT:

```
========== RESTART: C:/Users/computer/Desktop/[illegible]
/tatoo.py ==========
THIS IS MENU DRIVEN PROGRAM FOR OPERATING STACK
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>1
ENTER THE ELEMENT :1
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>1
ENTER THE ELEMENT :2
```

```
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>1
ENTER THE ELEMENT :34
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>2

STACK

         34
         2
         1
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>3
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>2

STACK

         2
         1
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
```

```
                ENTER THE OPTION >>>3
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>2

STACK

         1
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>4
NO. OF ELEMENTS IN STACK     :          1
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>6
ERROR
MENU  :

        1.PUSH INTEGER ELEMENT
        2.DISPLAY STACK
        3.POP ELEMENT
        4.DISPLAY NO.OF ELEMENTS
        5.CLOSE PROGRAM
                ENTER THE OPTION >>>5
>>>
```

37.
INPUT:

```
#Write a menu driven program to create connectivity with a table ‘movie’ already created in a database ‘Entertainment’ under MySql. (i)Write function to insert data as movie_code,movie name and director name of movie in above table ‘movie’. (ii)Write function to display data from table ‘movie ’ of a particular director. (iii)Write function to change director name of a movie. (iv) Write a function to delete detail of a movie on the basis of movie_code.
import mysql.connector
mycon=mysql.connector.connect(host="localhost",user='root',passwd="IIT-JEE",database="entertainment")
if mycon.is_connected:
    print("Mysql is connected")
cursor=mycon.cursor()
def insert():
    a=int(input("Enter the movie code"))
    b=str(input("Enter the movie name"))
    c=str(input("Enter the director name"))
    st="insert into movie(movie_code,movie_name,director_name)values({},'{}','{}')".format(a,b,c)
    cursor.execute(st)
    print("Data inserted successfully")
    mycon.commit()
def director():
    a=str(input("Enter the name of director you want to know about"))
    st="select * from movie where director_name='{}'".format(a)
    cursor.execute(st)
    data=cursor.fetchall()
    print("Movie_code\tMovie_name\tDirector")
    for i in data:
        for j in i:
            print(j,end="\t\t")
        print('')
    print("Data shown successfully")
    mycon.commit()
def update():
    b=int(input("Enter the movie code"))
    a=str(input("Enter the director name"))
    st="update movie set director_name='{}' where movie_code={}".format(a,b)
    cursor.execute(st)
    print("Data updated successfully")
    mycon.commit()
def delete():
    a=int(input("Enter the movie code"))
    st="delete from movie where movie_code={}".format(a,)
    cursor.execute(st)
    print("Data deleted successfully")
    mycon.commit()
b="T"
while b=="T":
    print("What do you want to do\n1.Insert value in the table\n2.Details of director \n3.update director name\n4.Delete records of a movie")
    a=int(input("Enter your choice"))
    if a==1:
```

```
        insert()
    elif a==2:
        director()
    elif a==3:
        update()
    elif a==4:
        delete()
    else:
        print("You have entered a wrong value")
    c=str(input("Do you want to continue?"))
    if c not in ["Y","y","T","t"]:
        b="F"
```

OUTPUT(PYTHON WINDOW):

```
============= RESTART: C:\Users\computer\Desktop\▄▬▀▄▀▀═▬▬\tote.py =============
Mysql is connected
What do you want to do
1.Insert value in the table
2.Details of director
3.update director name
4.Delete records of a movie
Enter your choice1
Enter the movie code123
Enter the movie nameelon musk
Enter the director namerobrt
Data inserted successfully
Do you want to continue?y
What do you want to do
1.Insert value in the table
2.Details of director
3.update director name
4.Delete records of a movie
Enter your choice1
Enter the movie code233
Enter the movie nameraja
Enter the director nameraja
Data inserted successfully
Do you want to continue?y
What do you want to do
1.Insert value in the table
2.Details of director
3.update director name
4.Delete records of a movie
Enter your choice1
Enter the movie code444
Enter the movie namegangas pf
Enter the director namemera chauhan
Data inserted successfully
Do you want to continue?y
```

What do you want to do
1.Insert value in the table
2.Details of director
3.update director name
4.Delete records of a movie
Enter your choice2
Enter the name of director you want to know aboutrobrt
Movie_code Movie_name Director
123 elon musk robrt
Data shown successfully
Do you want to continue?y
What do you want to do
1.Insert value in the table
2.Details of director
3.update director name
4.Delete records of a movie
Enter your choice3
Enter the movie code233
Enter the director namemera chauhan
Data updated successfully
Do you want to continue?y
What do you want to do
1.Insert value in the table
2.Details of director
3.update director name
4.Delete records of a movie
Enter your choice4
Enter the movie code444
Data deleted successfully
Do you want to continue?NO
>>>

OUTPUT(SQL WINDOW):

Enter password: *****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 20
Server version: 8.0.21 MySQL Community Server - GPL**

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

**mysql> USE ENTERTAINMENT;
Database changed
mysql> SELECT * FROM MOVIE;
+------------+------------+---------------+**

```
| movie_code | movie_name | director_name |
+------------+------------+---------------+
|        123 | elon musk  | robrt         |
|        233 | raja       | mera chauhan  |
+------------+------------+---------------+
2 rows in set (0.08 sec)

mysql>
```

38.
SQL WINDOW :

```
Enter password: *******
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 1
Server version: 5.5.62 MySQL Community Server (GPL)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database Computer;
Query OK, 1 row affected (0.01 sec)

mysql> use computer;
Database changed
mysql> create table student(Adm_no int PRIMARY KEY,Name varchar(90),Marks int);
Query OK, 0 rows affected (0.01 sec)

mysql> insert into student value(1,'Arjun',90);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student value(2,'Karan',89);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student value(3,'Siddhant',92);
Query OK, 1 row affected (0.01 sec)

mysql> insert into student value(4,'Aryan',90);
Query OK, 1 row affected (0.00 sec)

mysql> select * from student;
+--------+----------+-------+
| Adm_no | Name     | Marks |
+--------+----------+-------+
|      1 | Arjun    |    90 |
|      2 | Karan    |    89 |
|      3 | Siddhant |    92 |
|      4 | Aryan    |    90 |
+--------+----------+-------+
4 rows in set (0.00 sec)

mysql> update student set Marks=91 where Adm_no=1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from student;
+--------+----------+-------+
| Adm_no | Name     | Marks |
+--------+----------+-------+
|      1 | Arjun    |    91 |
|      2 | Karan    |    89 |
|      3 | Siddhant |    92 |
|      4 | Aryan    |    90 |
+--------+----------+-------+
4 rows in set (0.00 sec)

mysql> delete from student where Adm_no=2;
Query OK, 1 row affected (0.00 sec)

mysql> select * from student;
+--------+----------+-------+
| Adm_no | Name     | Marks |
+--------+----------+-------+
|      1 | Arjun    |    91 |
|      3 | Siddhant |    92 |
|      4 | Aryan    |    90 |
+--------+----------+-------+
3 rows in set (0.00 sec)

mysql> update student set Adm_no=5 where Name="Aryan";
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from student;
+--------+----------+-------+
| Adm_no | Name     | Marks |
+--------+----------+-------+
|      1 | Arjun    |    91 |
|      3 | Siddhant |    92 |
|      5 | Aryan    |    90 |
+--------+----------+-------+
3 rows in set (0.00 sec)

mysql> delete from student where Adm_no=1;
Query OK, 1 row affected (0.00 sec)

mysql> select * from student;
+--------+----------+-------+
| Adm_no | Name     | Marks |
+--------+----------+-------+
|      3 | Siddhant |    92 |
|      5 | Aryan    |    90 |
+--------+----------+-------+
2 rows in set (0.00 sec)

mysql> insert into student value(1,'Arjun',90);
```

```
Query OK, 1 row affected (0.01 sec)

mysql> select * from student;
+--------+----------+-------+
| Adm_no | Name     | Marks |
+--------+----------+-------+
|      1 | Arjun    |    90 |
|      3 | Siddhant |    92 |
|      5 | Aryan    |    90 |
+--------+----------+-------+
3 rows in set (0.00 sec)

mysql> Alter table student Add(City varchar(90) default"Delhi");
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> select * from student;
+--------+----------+-------+-------+
| Adm_no | Name     | Marks | City  |
+--------+----------+-------+-------+
|      1 | Arjun    |    90 | Delhi |
|      3 | Siddhant |    92 | Delhi |
|      5 | Aryan    |    90 | Delhi |
+--------+----------+-------+-------+
3 rows in set (0.00 sec)

mysql> select * from student where Marks>90;
+--------+----------+-------+-------+
| Adm_no | Name     | Marks | City  |
+--------+----------+-------+-------+
|      3 | Siddhant |    92 | Delhi |
+--------+----------+-------+-------+
1 row in set (0.00 sec)

mysql> Select distinct Marks from student;
+-------+
| Marks |
+-------+
|    90 |
|    92 |
+-------+
2 rows in set (0.00 sec)

mysql> select * from student where Marks between 89 and 91;
+--------+-------+-------+-------+
| Adm_no | Name  | Marks | City  |
+--------+-------+-------+-------+
|      1 | Arjun |    90 | Delhi |
|      5 | Aryan |    90 | Delhi |
+--------+-------+-------+-------+
2 rows in set (0.01 sec)
```

```
mysql> Select Adm_no,Name from student;
+--------+----------+
| Adm_no | Name     |
+--------+----------+
|      1 | Arjun    |
|      3 | Siddhant |
|      5 | Aryan    |
+--------+----------+
3 rows in set (0.00 sec)

mysql> Alter table student Add(Date_of_birth date);
Query OK, 3 rows affected (0.00 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> Select * from student;
+--------+----------+-------+-------+---------------+
| Adm_no | Name     | Marks | City  | Date_of_birth |
+--------+----------+-------+-------+---------------+
|      1 | Arjun    |    90 | Delhi | NULL          |
|      3 | Siddhant |    92 | Delhi | NULL          |
|      5 | Aryan    |    90 | Delhi | NULL          |
+--------+----------+-------+-------+---------------+
3 rows in set (0.00 sec)

mysql> Alter table student drop Date_of_birth;
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> Select * from student;
+--------+----------+-------+-------+
| Adm_no | Name     | Marks | City  |
+--------+----------+-------+-------+
|      1 | Arjun    |    90 | Delhi |
|      3 | Siddhant |    92 | Delhi |
|      5 | Aryan    |    90 | Delhi |
+--------+----------+-------+-------+
3 rows in set (0.00 sec)

mysql> create table student_log(Adm_no int PRIMARY KEY,Blood_Group varchar(10),class int);
Query OK, 0 rows affected (0.00 sec)

mysql> insert into student_log values(1,"B+",12);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student_log values(3,"A+",12);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student_log values(5,"O-",12);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from student_log;
+--------+-------------+-------+
| Adm_no | Blood_Group | class |
+--------+-------------+-------+
|      1 | B+          |    12 |
|      3 | A+          |    12 |
|      5 | O-          |    12 |
+--------+-------------+-------+
3 rows in set (0.00 sec)

mysql> select * from student,student_log where student.Adm_no=Student_log.Adm_no;
+--------+----------+-------+-------+--------+-------------+-------+
| Adm_no | Name     | Marks | City  | Adm_no | Blood_Group | class |
+--------+----------+-------+-------+--------+-------------+-------+
|      1 | Arjun    |    90 | Delhi |      1 | B+          |    12 |
|      3 | Siddhant |    92 | Delhi |      3 | A+          |    12 |
|      5 | Aryan    |    90 | Delhi |      5 | O-          |    12 |
+--------+----------+-------+-------+--------+-------------+-------+
3 rows in set (0.00 sec)
mysql> select * from student where name like "a%";
+--------+-------+-------+-------+
| Adm_no | Name  | Marks | City  |
+--------+-------+-------+-------+
|      1 | Arjun |    90 | Delhi |
|      5 | Aryan |    90 | Delhi |
+--------+-------+-------+-------+
2 rows in set (0.00 sec)

mysql> select * from student,student_log;
+--------+----------+-------+-------+--------+-------------+-------+
| Adm_no | Name     | Marks | City  | Adm_no | Blood_Group | class |
+--------+----------+-------+-------+--------+-------------+-------+
|      1 | Arjun    |    90 | Delhi |      1 | B+          |    12 |
|      3 | Siddhant |    92 | Delhi |      1 | B+          |    12 |
|      5 | Aryan    |    90 | Delhi |      1 | B+          |    12 |
|      1 | Arjun    |    90 | Delhi |      3 | A+          |    12 |
|      3 | Siddhant |    92 | Delhi |      3 | A+          |    12 |
|      5 | Aryan    |    90 | Delhi |      3 | A+          |    12 |
|      1 | Arjun    |    90 | Delhi |      5 | O-          |    12 |
|      3 | Siddhant |    92 | Delhi |      5 | O-          |    12 |
|      5 | Aryan    |    90 | Delhi |      5 | O-          |    12 |
+--------+----------+-------+-------+--------+-------------+-------+
9 rows in set (0.00 sec)

mysql>
```