PROJECT REPORT

ON

MAKING SYSTEM

COMPUTER SCIENCE

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CLASS: XII

SECTION: E

SCHOOL: DPS Indirapuram

BOARD ROLL NO:

SESSION: 2020-21

CERTIFICATE

This is to certify that DEVINA GOEL of class XII E has prepared her project on the topic **'PLAYLIST MAKING USING PYTHON'** in Computer science during the academic year 2020-21 for the partial fulfilment of her academic course under the guidance of Mrs. Rinkoo Gupta. The project is found worthy of acceptance as the final project report for the subject computer science of class XII.

Mrs. Rinkoo Gupta

(Computer Science teacher)

(DPS Indirapuram)

ACKNOWLEDGEMENT

I would like to extend my sincere and heartfelt gratitude to our computer science teacher **MRS. RINKOO GUPTA** as well as our principal **MRS. SANGEETA HAJELA** who gave me the golden opportunity to do this wonderful project on the topic of **MAKING A PLAYLIST MAKER USING PYTHON**, which helped me in putting my skills to test and I came to know so many new things. I am thankful to my computer teacher and other staff members for their ongoing support, guidance and encouragement

Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

THANK YOU!

DEVINA GOEL

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INTRODUCTION

In this project we created a simple playlist creator application in Python using the csv module.

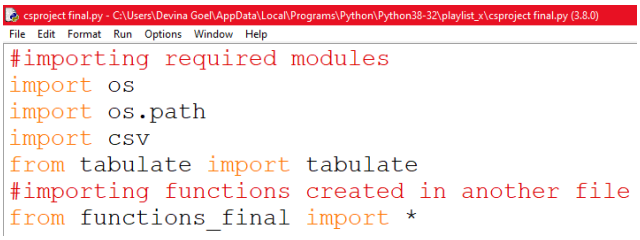
Listening to music is a hobby of almost every person you meet around daily, and every person likes to have a playlist reserved just for their favourite songs which they can listen to on loop.

Our application, **PlaylistX** helps the users to make playlists with their favourite songs without any hassle. They can also easily edit the created playlist by the edit playlist available.

The songs for the playlist our chosen from a text file that contains all the details of the songs. This file can be regularly updated by the admins of the application.

The application also includes an efficient search engine which helps the user to search a song based on its name, artist, album, decade, mood or genre.

Since Python has a very rich library support, so from the bunch of libraries we are going to use some of them to build our CUI based music playlist maker. The libraries we are going to use are:



- **OS -** This is a module that comes in the standard library of Python, we don't need to install it explicitly. OS provides different functions for interaction with the Operating System. In this project, we are going to use OS for creating files and deleting playlists in the form of text files from the specified directory.

- **CSV -** This is a built-in module, so you do not need to install it, However, you must import it in any script that uses it. It implements classes to read and write tabular data in CSV format. CSV files give us a good, simple way to organize data without using a database program. It's easy to read from and write to CSV files with Python. In

this project we are using this module to tabulate our data in the text files in order to make playlists and other required structures.

- **TABULATE -** Tabulate is a module that allows you to display table data beautifully. It is not part of standard Python library, so tabulate needs to be installed. To install tabulate run the following command in the command prompt or power shell of your windows system:

```
pip install tabulate
```

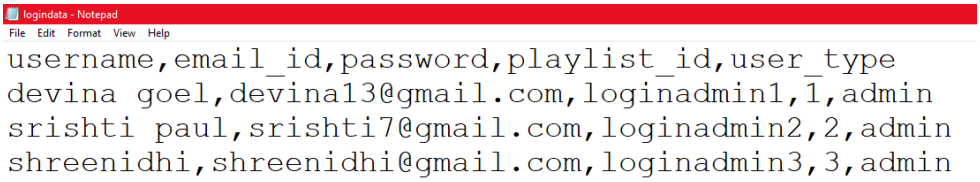
We use the tabulate function of this function which is used to display various structures in the tabular form. It is the used to view various playlists and other tables.

- **functions_final** is a user defined module which we have created to compile all our functions in one file.

MYSQL TABLES/ CSV FILES USED/ BINARY FILES USED AND THEIR STRUCTURE

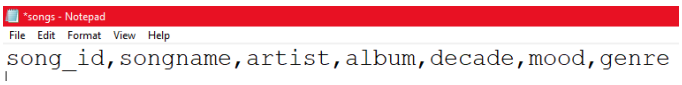
We have used text files structures tabulated using the csv module. There are three main structures:

- **logindata.txt** – This structure includes all the information about the users and admins. It includes the fields username, email ID, password, user type (user or admin), playlist ID (unique for every user to uniquely identify their respective playlists). The program preloads three records in this structure for the admins and the rest records are the added by the signup option.



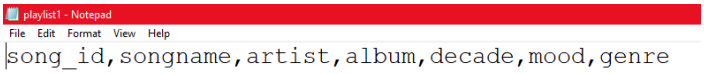
- **songs.txt** – This structure includes the information about the songs and the records in this structure can be iterated while to search a song for the user. It includes the fields song ID

(unique for every song), song name, artist, album, decade, mood and genre. This structure can only be edited by the admins.



- **playlist.txt** – This structure includes all the information about all the playlists created by the respective users. It includes the fields playlist ID, username and playlist name. a record in inserted into this structure when a user creates a new playlist.

Whenever a user creates a new playlist the program creates a new structure with the name given by the respective user and fields remain the same as those in the structure ‘songs.txt’.
For example if a playlist with a name playlist1 is created a file with name playlist1.txt will be formed in the current directory with the following structure.



REQUIREMENTS

Recommended Operating Systems

- Windows: 7 or newer
- MAC: OS X v10.7 or higher
- Linux: Ubuntu

Hardware Requirements

We strongly recommend a computer fewer than 5 years old.

- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above
- Sound card w/speakers

Software Requirements

- Python 3.8 or newer version
- If python is not an available option than C++ can be used to supplement.
- CSV module should be there in the system.

CODING

Coding from the functions file:

```
#importing required modules
import csv
import os
from tabulate import tabulate


#function for signing in
def signin(m,p,k):
    f=open('logindata.txt','r')
    cr=csv.reader(f,lineterminator='\n')
    fields=next(cr)
    reclist=[]
    for rec in cr:
        if rec!=[]:
            reclist.append(rec)
    pwd=''
    if k==1:
        for rec in reclist:
```

```
            if m in rec[0]:
                pwd=rec[2]
        if p==pwd:
            return 'login successful'
        else:
            return 'incorrect usrname or password'
    elif k==2:
        for rec in reclist:
            if m in rec[1]:
                pwd=rec[2]
        if p==pwd:
            return 'login successful'
        else:
            return 'incorrect password'
    f.close()

#function to check if the proper mail id is provided
def email_id(e):
    l_email=len(e)
```

```
    str1=e.split('@')
    l=len(str1)
    if l!=2:
        return 'invalid emailID'
    else:
        dom='@'+str1[1]
        l_dom=len(dom)
        sub=e[l_email-l_dom:]
        if sub==dom:
            if l_dom!=l_email:
                return True
            else:
                return False


#function to check if the username is unique
def username(u):
    f=open('logindata.txt','r')
    cr=csv.reader(f,lineterminator='\n')
    fields=next(cr)
```

```
    reclist=[]
    for rec in cr:
        if rec!=[]:
            if u in rec[0]:
                return 'username not available'
    else:
        return True
    f.close()


#function to check if entered password is valid or
not
def password(p,c):
    if len(p)<8:
        return 'password should atleast have 8
characters'
    elif p!=c:
        return 'passwords do not match'
    else:
        return True
```

```
#function to generate playlist id
def playlist_id():
    f=open('logindata.txt','r')
    cr=csv.reader(f,lineterminator='\n')
    x=0
    fields=next(cr)
    for rec in cr:
        if rec!=[]:
            if int(rec[3])>x:
                x=int(rec[3])
    i=x+1
    print("your playlist id: ",i)
    return i
    f.close()
    return i

#function to search for a record
def search():
    f=open('songs.txt','r')
```

```
    cr=csv.reader(f,lineterminator='\n')
    fields=next(cr)
    while True:

print('1:name','2:artist','3:genre','4:album','5:mood','
6:decade',sep='\n')
        n=int(input('enter your choice: '))
        #searching on the basis of song name
        if n==1:
            nm=input('enter song name: ')
            flag=False
            reclist=[]
            for rec in cr:
                if rec!=[]:
                    if rec[1]==nm:
                        reclist.append(rec)
            for a in reclist:
                print(a)
                t=input("is this the song? y/n: ")
                if t=='y':
```

```
            flag=True
            return a
        elif t=='n':
            continue
        else:
            return 'please enter a valid choice'
    if flag==False:
        return "song not available"
#searching on the basis of artist name
elif n==2:
    nm=input('enter artist name: ')
    flag=False
    reclist=[]
    for rec in cr:
        if rec!=[]:
            if rec[2]==nm:
                reclist.append(rec)
    for a in reclist:
        print(a)
```

```
            t=input("is this the song? y/n: ")
            if t=='y':
                flag=True
                return a
            elif t=='n':
                continue
            else:
                return 'please enter a valid choice'
        if flag==False:
            return "song not available"
    #searching on the basis of genre
    elif n==3:
        nm=input('enter genre: ')
        flag=False
        reclist=[]
        for rec in cr:
            if rec!=[]:
                if rec[6]==nm:
                    reclist.append(rec)
```

```
        for a in reclist:
            print(a)
            t=input("is this the song? y/n: ")
            if t=='y':
                flag=True
                return a
            elif t=='n':
                continue
            else:
                return 'please enter a valid choice'
        if flag==False:
            return "song not available"
    #searching on the basis of album name
    elif n==4:
        nm=input('enter album name: ')
        flag=False
        reclist=[]
        for rec in cr:
            if rec!=[]:
```

```
            if rec[3]==nm:
                reclist.append(rec)
    for a in reclist:
        print(a)
        t=input("is this the song? y/n: ")
        if t=='y':
            flag=True
            return a
        elif t=='n':
            continue
        else:
            return 'please enter a valid choice'
    if flag==False:
        return "song not available"
#searching on the basis on mood
elif n==5:
    nm=input('enter mood: ')
    flag=False
    reclist=[]
```

```
        for rec in cr:
            if rec!=[]:
                if rec[5]==nm:
                    reclist.append(rec)
        for a in reclist:
            print(a)
            t=input("is this the song? y/n: ")
            if t=='y':
                flag=True
                return a
            elif t=='n':
                continue
            else:
                return 'please enter a valid choice'
        if flag==False:
            return "song not available"
    #searching on the basis on decade
    elif n==6:
        nm=input('enter decade: ')
```

```
        flag=False
        reclist=[]
        for rec in cr:
            if rec!=[]:
                if rec[4]==nm:
                    reclist.append(rec)
        for a in reclist:
            print(a)
            t=input("is this the song? y/n: ")
            if t=='y':
                flag=True
                return a
            elif t=='n':
                continue
            else:
                return 'please enter a valid choice'
        if flag==False:
            return "song not available"
    else:
```

```
            return 'enter a valid choice'
        a=input('do you want to search again y/n: ')
        if a=='y':
            continue
        elif a=='n':
            f.close()
            break
        else:
            return 'enter a valid choice'

#adding song to the songs file(for admin)
def addsong():
    while True:
        f=open('songs.txt','a+' , newline='')
        cr=csv.reader(f,lineterminator='\n')
        cw=csv.writer(f,delimiter=',')
        rec=[]
        s=int(input('enter song_id: '))
        sn=input('enter song name: ')
```

```
        a=input('enter artist: ')
        al=input('enter album: ')
        d=input('enter decade: ')
        m=input('enter mood: ')
        g=input('enter genre: ')
        rec=[s,sn,a,al,d,m,g]
        flag=True
        for ctr in cr:
            if ctr!=[]:
                if s==ctr[0]:
                    print('song id is not unique')
                    flag=False
                    break
        if flag==True:
            cw.writerow(rec)
        print('-'*46+'record successfully inserted'+'-
'*47)
        a=input('do you want enter more records y/n:
')
        if a=='y':
```

```
            continue
        elif a=='n':
            f.close()
            break
        else:
            print('enter a valid choice')
            continue

#function to delete a record(for admin)
def deletesong():
    while True:
        f=open('songs.txt','r')
        cr=csv.reader(f,lineterminator='\n')

fields=['song_id','songname','artist','album','decade'
,'mood','genre']
        reclist=[]
        l1=next(cr)
        sn=input('enter song_name to be deleted: ')
        a=input('artist of the song: ')
```

```
        for rec in cr:
            if rec!=[]:
                reclist.append(rec)
        f.close()
        g=open('songs.txt','w' , newline='')
        cw=csv.writer(g,delimiter=',')
        cw.writerow(fields)
        for r in reclist:
            if r!=[]:
                if r[1]==sn and r[2]==a:
                    print(r)
                    ans=input('do you want to delete this
record? y/n: ')
                    if ans=='y':
                        print('-'*46+'record successfully
deleted'+'-'*47)
                        pass
                    else:
                        print('-'*46+'record not deleted'+'-
'*47)
```

```
                    cw.writerow(r)
                else:
                    cw.writerow(r)
        g.close()
        w=input('do you want to delete any other record? y/n: ')
        if w=='y':
            continue
        elif w=='n':
            break
        else:
            print('enter a valid choice')


#function to update a record(for admin)
def updatesong():
    while True:
        #checking if the record exists in the song file
        f=open('songs.txt','r')
        cr=csv.reader(f,lineterminator='\n')
```

```
fields=['song_id','songname','artist','album','decade'
,'mood','genre']
        reclist=[]
        z=input('song_id of the song that is to be
updated: ')
        flag=False
        for rec in cr:
            if rec!=[]:
                reclist.append(rec)
                if rec[0]==z:
                    a=rec
                    flag=True
        f.close()
        if flag==False:
            print('-'*46+'record not found'+'-'*47)
        else:
            print(a)
            l=input('do you want to update the record?
y/n: ')
```

```
        print('what do you want to update ?')
        print('1:song
name','2:artist','3:album','4:mood','5:decade','6:genr
e',sep='\n')
        ctr=int(input('ENTER YOUR CHOICE: '))
        if l=='y':
            #updating song name in the record
            if ctr==1:
                nm=input('enter new song name: ')
                for rec in reclist:
                    if rec[0]==z:
                        rec[1]=nm
                g=open('songs.txt','w' , newline='')
                cw=csv.writer(g,delimiter=',')
                cw.writerow(fields)
                for i in range(1,len(reclist)):
                    cw.writerow(reclist[i])
                print('-'*46+'record updated
successfully'+'-'*47)
                g.close()
```

```
            #updating artist name in the record
            elif ctr==2:
                nm=input('enter new artist name: ')
                for rec in reclist:
                    if rec[0]==z:
                        rec[2]=nm
                g=open('songs.txt','w' , newline='')
                cw=csv.writer(g,delimiter=',')
                cw.writerow(fields)
                for i in range(1,len(reclist)):
                    cw.writerow(reclist[i])
                print('-'*46+'record updated
successfully'+'-'*47)
                g.close()
            #updating album name in the record
            elif ctr==3:
                nm=input('enter new album name: ')
                for rec in reclist:
                    if rec[0]==z:
                        rec[3]=nm
```

```
            g=open('songs.txt','w' , newline='')
            cw=csv.writer(g,delimiter=',')
            cw.writerow(fields)
            for i in range(1,len(reclist)):
                cw.writerow(reclist[i])
            print('-'*46+'record updated
successfully'+'-'*47)
            g.close()
        #updating mood in the record
        elif ctr==4:
            nm=input('enter new mood: ')
            for rec in reclist:
                if rec[0]==z:
                    rec[5]=nm
            g=open('songs.txt','w' , newline='')
            cw=csv.writer(g,delimiter=',')
            cw.writerow(fields)
            for i in range(1,len(reclist)):
                cw.writerow(reclist[i])
```

```
            print('-'*46+'record updated
successfully'+'-'*47)
            g.close()
        #updating decade in the record
        elif ctr==5:
            nm=input('enter new decade: ')
            for rec in reclist:
                if rec[0]==z:
                    rec[4]=nm
            g=open('songs.txt','w' , newline='')
            cw=csv.writer(f,delimiter=',')
            cw.writerow(fields)
            for i in range(1,len(reclist)):
                cw.writerow(reclist[i])
            print('-'*46+'record updated
successfully'+'-'*47)
            g.close()
        #updating genre in the record
        elif ctr==6:
            nm=input('enter new genre: ')
```

```
                for rec in reclist:
                    if rec[0]==z:
                        rec[6]=nm
                g=open('songs.txt','w' , newline='')
                cw=csv.writer(g,delimiter=',')
                cw.writerow(fields)
                for i in range(1,len(reclist)):
                    cw.writerow(reclist[i])
                print('-'*46+'record updated
successfully'+'-'*47)
                g.close()
            x=input('do you want to update more
records? y/n: ')
            if x=='y':
                continue
            elif x=='n':
                break
            else:
                print('enter a valid choice')
                continue
```

```
            elif l=='n':
                print('record not updated')
                break
            else:
                print('enter a valid choice')
                continue

#function to create playlist (for user)
def playlist_name(n):
    j=0
    f=open('logindata.txt','r')
    cr=csv.reader(f,lineterminator='\n')
    l1=next(cr)
    m=input("by (username): ")
    for rec in cr:
        if rec!=[]:
            if rec[0]==m:
                j=rec[3]
    f.close()
```

```
g=open('playlist.txt','a+',newline='')
cr=csv.reader(g,lineterminator='\n')
try:
    l2=next(cr)
except StopIteration:
    l2=[]
    pass
cw=csv.writer(g,delimiter=',')
flag=True
for rec in l2:
    if rec!=[]:
        if rec[1]==m and rec[2]==n:
            print('playlist already exists')
            flag=False
if flag==True:
    a=[j,m,n]
    cw.writerow(a)
    g.close()
    filename=n+'.txt'
```

```
        f1=open(filename,'w' , newline='')
        cw=csv.writer(f1,delimiter=',')

fields=['song_id','songname','artist','album','decade'
,'mood','genre']
        cw.writerow(fields)
        f1.close()

#function to add song to a playlist (for user)
def add_songp(n):
    while True:
        x=search()
        f=open('playlist.txt','r')
        cr=csv.reader(f,lineterminator='\n')
        l1=next(cr)
        reclist=[]
        for rec in cr:
            if rec!=[]:
                pln=rec[2]
                reclist.append(pln)
```

```
        if n not in reclist:
            print("playlist does not exist")
            break
        else:
            pass
        filename=n+'.txt'
        f1=open(filename,'a' , newline='')
        cw=csv.writer(f1,delimiter=',')
        if x!='song not available' and x!='please enter
a valid choice':
            y=list(x)
            cw.writerow(y)
            print("song successfully added")
        else:
            print(x)
        f1.close()
        g=input("do you want to add more songs y/n:
")
        if g=='y':
            continue
```

```
        elif g=='n':
            break
        else:
            print('enter a valid choice')


#function to delete song from a playlist (for user)
def delete_songp(n):
    while True:
        nm=input("enter song to be deleted: ")
        ar=input("enter name of the artist of the song:
")
        filename=n+'.txt'
        f1=open(filename,'r')
        cr=csv.reader(f1,lineterminator='\n')

fields=['song_id','songname','artist','album','decade'
,'mood','genre']
        reclist=[]
        flag=False
        l1=next(cr)
```

```
print(l1)
for rec in cr:
    if rec!=[]:
        reclist.append(rec)
        if rec[1]==nm and rec[2]==ar:
            flag=True
if reclist==[]:
    print("empty playlist")
f1.close()
if flag==False:
    print('record not found')
else:
    g=open(filename,'w' , newline='')
    cw=csv.writer(g,delimiter=',')
    cw.writerow(fields)
    for r in reclist:
        if r!=[]:
            if r[1]==nm and r[2]==ar:
                print(r)
```

```
                    ans=input('do you want to delete this record? y/n: ')
                    if ans=='y':
                        print('-'*46+'record successfully deleted'+'-'*47)
                        pass
                    else:
                        print('-'*46+'record not deleted'+'-'*47)
                        cw.writerow(r)
                else:
                    cw.writerow(r)
        g.close()
    d=input("do you want to select another song to remove? y/n: ")
    if d=='y':
        continue
    else:
        break
```

```
#function to view playlist
def view_playlist(r,t):
    g=open('playlist.txt','r')
    cr=csv.reader(g,lineterminator='\n')
    fields=next(cr)
    flag=False
    for rec in cr:
        if rec!=[]:
            if rec[2]==r and rec[0]==t:
                flag=True
    g.close()
    if flag==False:
        print('playlist does  not exist')
    else:
        filename=r+'.txt'
        f1=open(filename,'r')
        cr=csv.reader(f1,lineterminator='\n')
        fields=next(cr)
        data=[]
```

```
        l=[]
        for rec in cr:
            if rec!=[]:
                l=[rec[1],rec[2]]
                data.append(l)
        if data==[]:
            print('empty playlist')
        else:

x=tabulate(data,[fields[1],fields[2]],tablefmt='prett
y')
            print(x)
        f1.close()


# deleting playlist
def delete_playlist(r,t):
    view_playlist(r,t)
    b=input('do you want to delete this playlist? y/n:
')
    filename=r+'.txt'
```

```
if b=='y':
    os.remove(filename)
    f=open('playlist.txt','r')
    cr=csv.reader(f,lineterminator='\n')
    fields=['playlist_id','username','playlistname']
    reclist=[]
    for rec in cr:
        if rec!=[]:
            reclist.append(rec)
    f.close()
    g=open('playlist.txt','w' , newline='')
    cw=csv.writer(g,delimiter=',')
    cw.writerow(fields)
    for i in range(1,len(reclist)):
        if rec[2]==r and rec[0]==t:
            pass
        else:
            cw.writerow(rec)
    print('-'*46+'playlist deleted'+'-'*47)
```

```
        g.close()
    elif b=='n':
        print('playlist not deleted')
    else:
        print('enter a valid choice')
```

Coding from the main file:

```
#importing required modules
import os
import os.path
import csv
from tabulate import tabulate
#importing functions created in another file
from functions_final import *


#creating logindata file
if os.path.isfile('logindata.txt'):
    print('logindata already exists')
else:
    f=open('logindata.txt','w' , newline='')
```

```
    cw=csv.writer(f,delimiter=',')

fields=['username','email_id','password','playlist_id
','user_type']
    cw.writerow(fields)
    #Adding Admin's data to login data
    l=[['devina
goel','devina13@gmail.com','loginadmin1','1','adm
in'],['srishti
paul','srishti7@gmail.com','loginadmin2','2','admin'
],\
['shreenidhi','shreenidhi@gmail.com','loginadmin3'
,'3','admin']]
    for rec in l:
        cw.writerow(rec)
    f.close()

#creating songs file
if os.path.isfile('songs.txt'):
    print('songs already exists')
else:
```

```
    f=open('songs.txt','w' , newline='')
    cw=csv.writer(f,delimiter=',')

fields=['song_id','songname','artist','album','decade'
,'mood','genre']
    cw.writerow(fields)
    f.close()

#creating file for list of playlists
if os.path.isfile('playlist.txt'):
    print('playlist already exists')
else:
    f=open('playlist.txt','w' , newline='')
    cw=csv.writer(f,delimiter=',')
    fields=['playlist_id','username','playlistname']
    cw.writerow(fields)
    f.close()
a='*'*121
b='-'*50+'WELCOME TO PLAYLISTX'+'-'*50
c='*'*121
```

```
print(a,b,c,sep='\n')
while True:
    print("1: Sign Up")
    print("2: Sign In")
    print('0: Log Out')
    z=int(input("ENTER YOUR CHOICE: "))
    if z==1:
        #code for sign up
        u=input('enter username: ')
        if username(u)=="username not available":
            print("username already exists")
            continue
        else:
            p=input('enter password: ')
            c=input('confirm password: ')
            if password(p,c)!=True:
                print(password(p,c))
                continue
            else:
```

```
            e=input('enter email ID: ')
            if email_id(e)!=True:
                print(email_id(e))
                continue
            else:
                i=playlist_id()
                ut='user'
                f=open('logindata.txt','a')
                cw=csv.writer(f,delimiter=',')
                rec=[u,e,p,i,ut]
                cw.writerow(rec)
                f.close()
                print('signed up successfully')
                continue
    elif z==2:
        #code for signing in
        while True:
            print("SIGN IN BY:","1: Username","2:
Email","0: Exit",sep='\n')
            n=int(input('ENTER YOUR CHOICE: '))
```

```
        if n==1:
            m=input('enter username: ')
            p=input('enter password: ')
            i=signin(m,p,n)
            if i!='login successful':
                print(i)
                print('please try again or create a new
account')
                continue
            else:
                print(i)
                f=open('logindata.txt','r')
                cr=csv.reader(f)
                fields=next(cr)
                for rec in cr:
                    if rec!=[]:
                        if rec[0]==m:
                            a=rec[4]
                f.close()
                if a=='user':
```

```
                #sub menu for user
                while True:
                    print('1: Search','2: Create
Playlist','3: View Playlist','4: Edit Playlist','0: Log
Out',sep='\n')
                    l=int(input('ENTER YOUR
CHOICE: '))
                    if l==1:
                        print(search())
                        continue
                    elif l==2:
                        n=input('enter playlist name: ')
                        playlist_name(n)
                        continue
                    elif l==3:
                        g=open('logindata.txt','r')

cr=csv.reader(g,lineterminator='\n')
                        fields=next(cr)
                        for rec in cr:
```

```
                    if rec!=[]:
                        if rec[0]==m:
                            t=rec[3]
                    g.close()
                    r=input('enter playlist name to
be viewed: ')
                    view_playlist(r,t)
                elif l==4:
                    #sub menu for editing playlist
                    while True:
                        print('1: Delete Playlist','2:
Delete From Playlist','3: Add To Playlist','0:
Exit',sep='\n')
                        d=int(input('ENTER YOUR
CHOICE: '))
                        if d==1:
                            g=open('logindata.txt','r')

cr=csv.reader(g,lineterminator='\n')
                            fields=next(cr)
                            for rec in cr:
```

```
                    if rec!=[]:
                        if rec[0]==m:
                            t=rec[3]
                g.close()
                r=input('enter name of playlist to be deleted: ')
                delete_playlist(r,t)
            elif d==2:
                r=input('enter name of the playlist from which song is to be deleted: ')
                delete_songp(r)
            elif d==3:
                r=input('enter name of the playlist to which song is to added: ')
                add_songp(r)
            elif d==0:
                break
            else:
                print('enter a valid choice')
```

```
                    continue
                elif l==0:
                    break
                else:
                    print('enter a valid choice')
                    continue
            elif a=='admin':
                #sub menu for admin
                while True:
                    print('1: View Logindata','2: Edit
Songs File','3: View All Playlists Name','0:
Exit',sep='\n')
                    l=int(input('ENTER YOUR
CHOICE: '))
                    if l==1:
                        f1=open('logindata.txt','r')

cr=csv.reader(f1,lineterminator='\n')
                        fields=next(cr)
                        data=[]
```

```
                    for rec in cr:
                        if rec!=[]:
                            data.append(rec)

x=tabulate(data,fields,tablefmt='pretty')
                    print(x)
                    f1.close()
                elif l==2:
                    #sub menu for editing song
file
                    while True:
                        print('1: Add Song','2:
Delete Song','3: Update Song','4: View Songs','0:
Exit',sep='\n')
                        d=int(input('ENTER YOUR
CHOICE: '))
                        if d==1:
                            addsong()
                        elif d==2:
                            deletesong()
                        elif d==3:
```

```
                updatesong()
            elif d==4:
                f1=open('songs.txt','r')

cr=csv.reader(f1,lineterminator='\n')

fields=['song_id','songname','artist','album','decade'
,'mood','genre']
                data=[]
                l2=next(cr)
                for rec in cr:
                    if rec!=[]:
                        data.append(rec)

x=tabulate(data,fields,tablefmt='pretty')
                print(x)
                f1.close()
            elif d==0:
                break
            else:
```

```
                    print('enter a valid
choice')
                    continue
            elif l==3:
                f1=open('playlist.txt','r')

cr=csv.reader(f1,lineterminator='\n')
                fields=next(cr)
                data=[]
                for rec in cr:
                    if rec!=[]:
                        data.append(rec)

x=tabulate(data,fields,tablefmt='pretty')
                print(x)
                f1.close()
            elif l==0:
                break
            else:
                print('enter a valid choice')
```

```
                    continue
            elif n==2:
                #signing in using email id
                m=input('enter email: ')
                p=input('enter password: ')
                i=signin(m,p,n)
                print(i)
                if i!='login successful':
                    print('please try again or create a new
account')
                    continue
                else:
                    print(i)
                    f=open('logindata.txt','r')
                    cr=csv.reader(f,lineterminator='\n')
                    fields=next(cr)
                    for rec in cr:
                        if rec!=[]:
                            if rec[1]==m:
                                a=rec[4]
```

```
                f.close()
                if a=='user':
                    #sub menu for user
                    while True:
                        print('1: Search','2: Create
Playlist','3: View Playlist','4: Edit Playlist','0: Log
Out',sep='\n')
                        l=int(input('ENTER YOUR
CHOICE: '))
                        if l==1:
                            print(search())
                            continue
                        elif l==2:
                            n=input('enter playlist name: ')
                            playlist_name(n)
                            continue
                        elif l==3:
                            g=open('logindata.txt','r')

cr=csv.reader(g,lineterminator='\n')
```

```
                    fields=next(cr)
                    for rec in cr:
                        if rec!=[]:
                            if rec[1]==m:
                                t=rec[3]
                    g.close()
                    r=input('enter playlist name to
be viewed: ')
                    view_playlist(r,t)
                elif l==4:
                    #sub menu for editing playlist
                    while True:
                        print('1: Delete Playlist','2:
Delete From Playlist','3: Add To Playlist','0:
Exit',sep='\n')
                        d=int(input('ENTER YOUR
CHOICE: '))
                        if d==1:
                            g=open('logindata.txt','r')

cr=csv.reader(g,lineterminator='\n')
```

```
                    fields=next(cr)
                    for rec in cr:
                        if rec!=[]:
                            if rec[1]==m:
                                t=rec[3]
                    g.close()
                    r=input('enter name of
playlist to be deleted: ')
                    delete_playlist(r,t)
                elif d==2:
                    r=input('enter name of the
playlist from which song is to be deleted: ')
                    delete_songp(r)
                elif d==3:
                    r=input('enter name of the
playlist to which song is to added: ')
                    add_songp(r)
                elif d==0:
                    break
                else:
```

```
                    print('enter a valid
choice')
                    continue
                elif l==0:
                    break
                else:
                    print('enter a valid choice')
                    continue
            elif a=='admin':
                #sub menu for admin
                while True:
                    print('1: View Logindata','2: Edit
Song File','3: View All Playlists Name','0:
Exit',sep='\n')
                    l=int(input('ENTER YOUR
CHOICE: '))
                    if l==1:
                        f1=open('logindata.txt','r')

cr=csv.reader(f1,lineterminator='\n')
                        fields=next(cr)
```

```
                    data=[]
                    for rec in cr:
                        if rec!=[]:
                            data.append(rec)

x=tabulate(data,fields,tablefmt='pretty')
                    print(x)
                    f1.close()
                elif l==2:
                    #sub menu for editing song
file
                    while True:
                        print('1: Add Song','2:
Delete Song','3: Update Song','4: View Songs','0:
Exit',sep='\n')
                        d=int(input('ENTER YOUR
CHOICE: '))
                        if d==1:
                            addsong()
                        elif d==2:
                            deletesong()
```

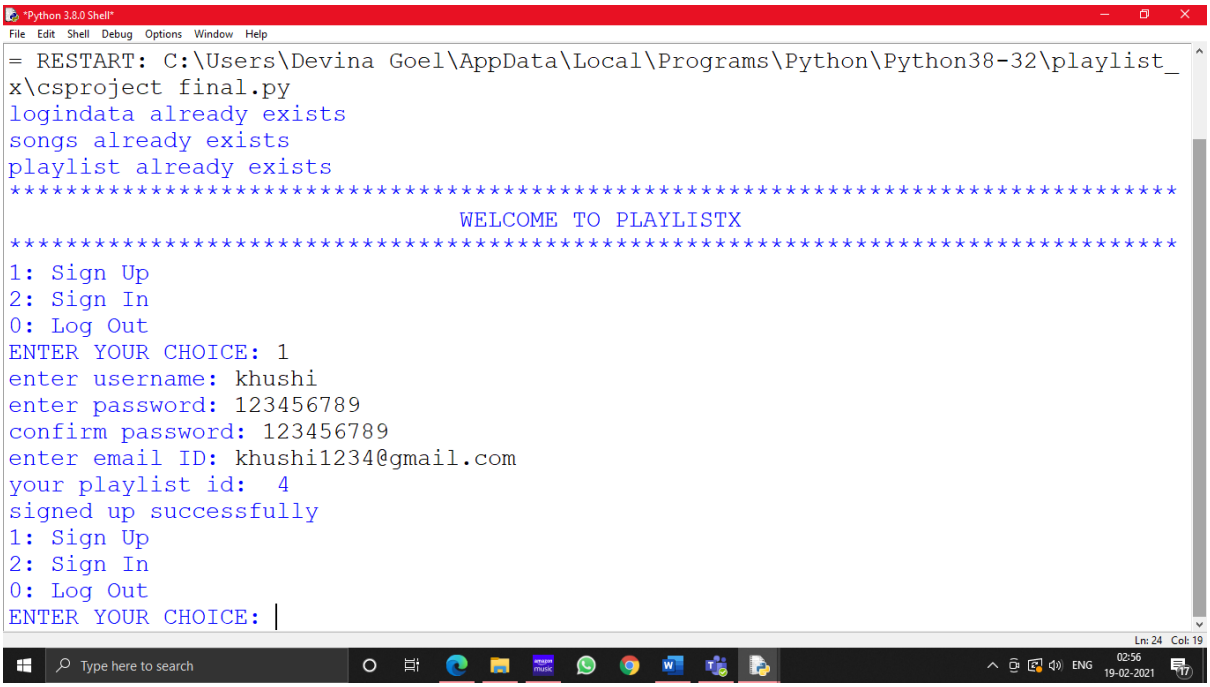
```
                elif d==3:
                    updatesong()
                elif d==4:
                    f1=open('songs.txt','r')

cr=csv.reader(f1,lineterminator='\n')
                    fields=next(cr)
                    data=[]
                    for rec in cr:
                        if rec!=[]:
                            data.append(rec)

x=tabulate(data,fields,tablefmt='pretty')
                    print(x)
                    f1.close()
                elif d==0:
                    break
                else:
                    print('enter a valid
choice')
```

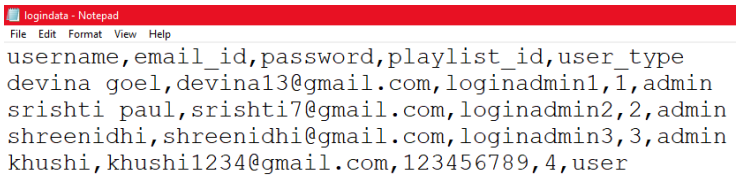
```
                    continue
                elif l==3:
                    f1=open('playlist.txt','r')

cr=csv.reader(f1,lineterminator='\n')
                    fields=next(cr)
                    data=[]
                    for rec in cr:
                        if rec!=[]:
                            data.append(rec)

x=tabulate(data,fields,tablefmt='pretty')
                    print(x)
                    f1.close()
                elif l==0:
                    break
                else:
                    print('enter a valid choice')
                    continue
```

```
            elif n==0:
                break
    #ending program
    elif z==0:
            print('*'*121)
            print('YOU HAVE BEEN LOGGED
OUT'.center(121))
            print('*'*121)
            break
    else:
        print('enter a valid choice')
        continue
```

OUTPUTS

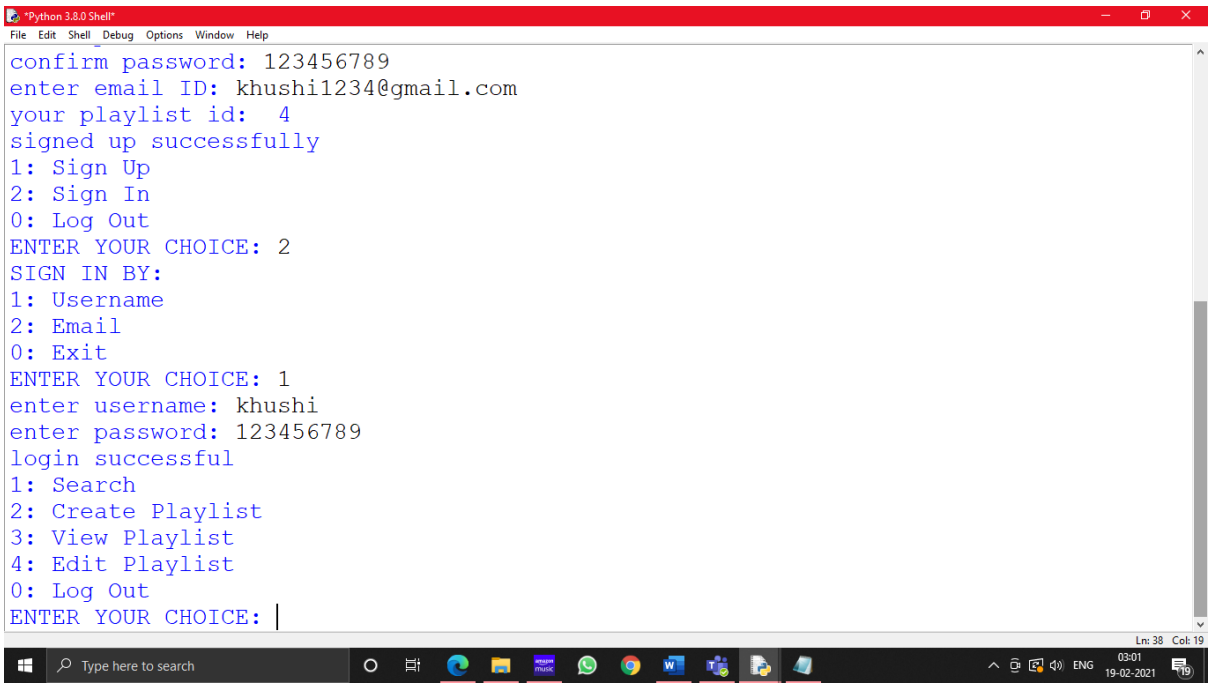
- **Signing up:**





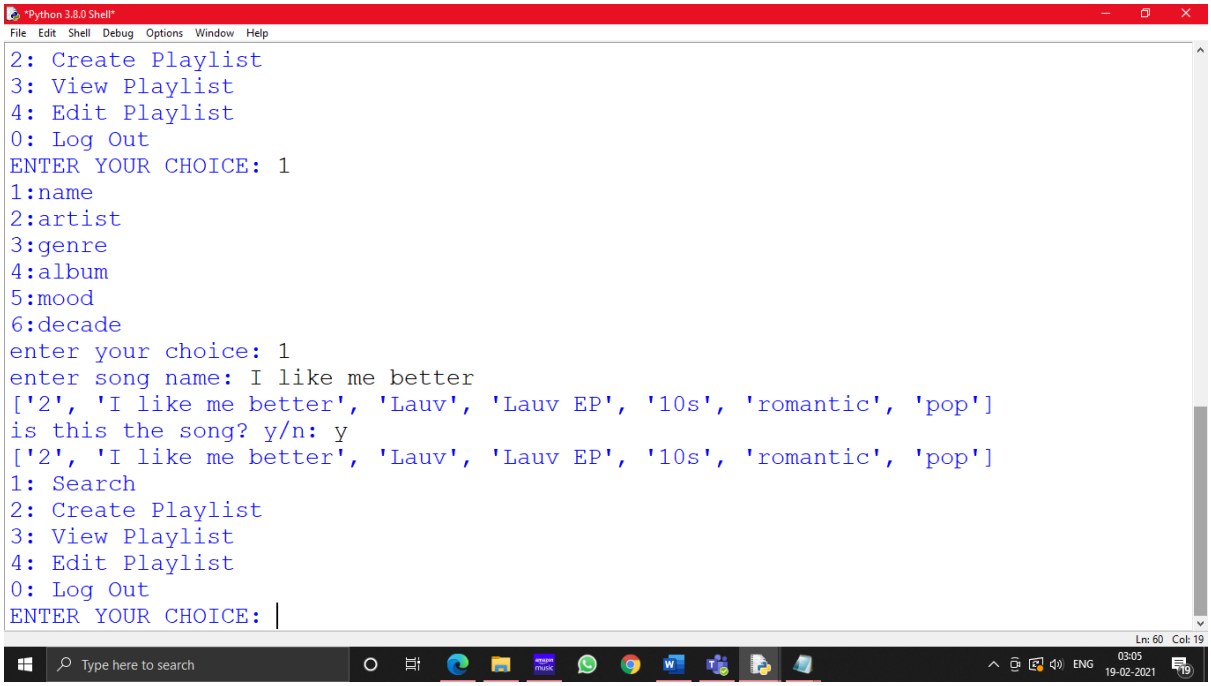
We can see that the program added the entry for username Khushi in the end with the autogenerated playlist ID 4

- **Signing in as a user:**

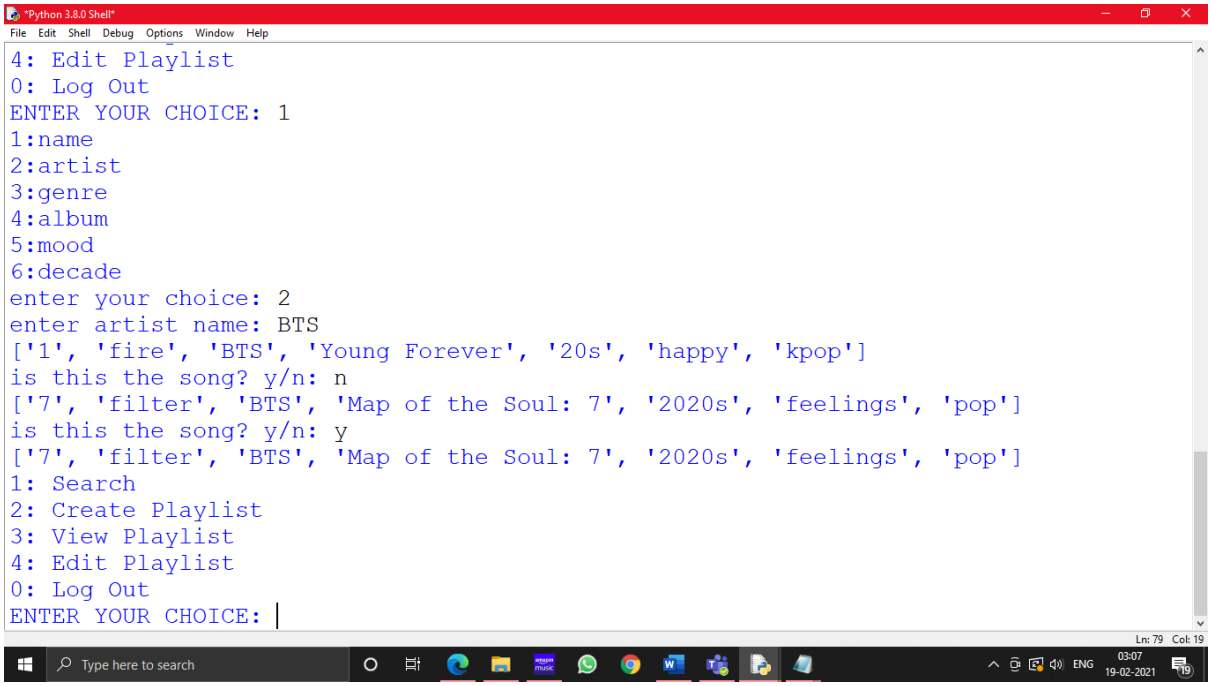


- **Searching for a song:**

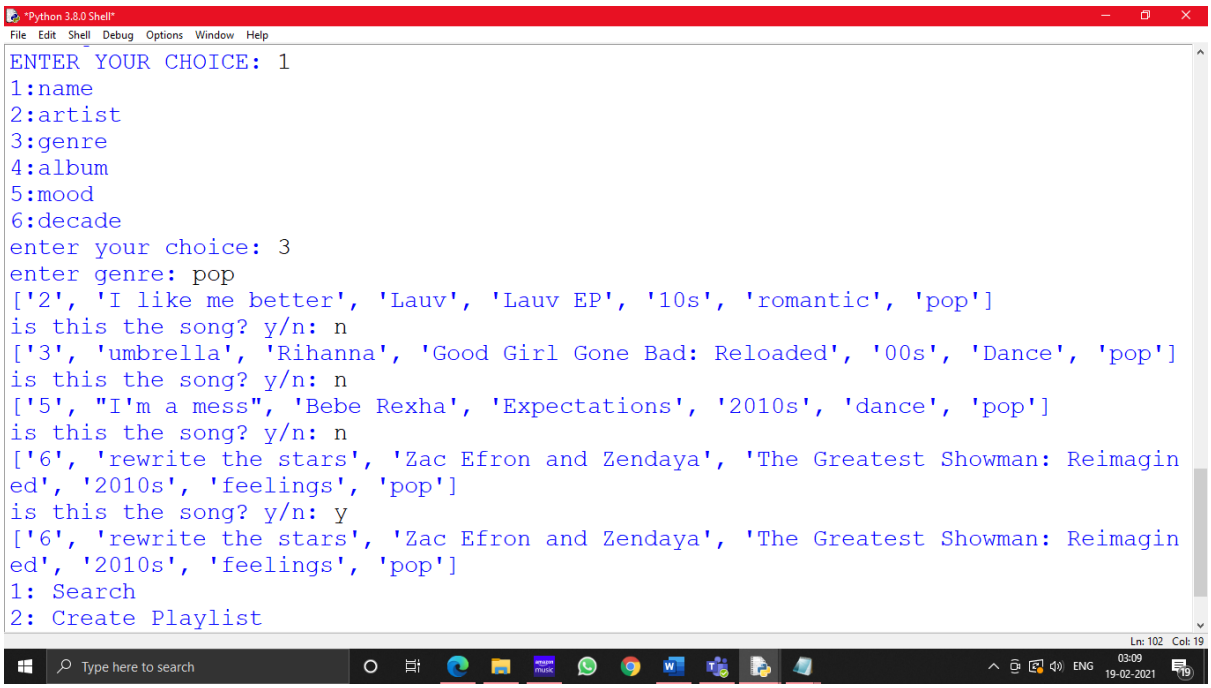
  By name



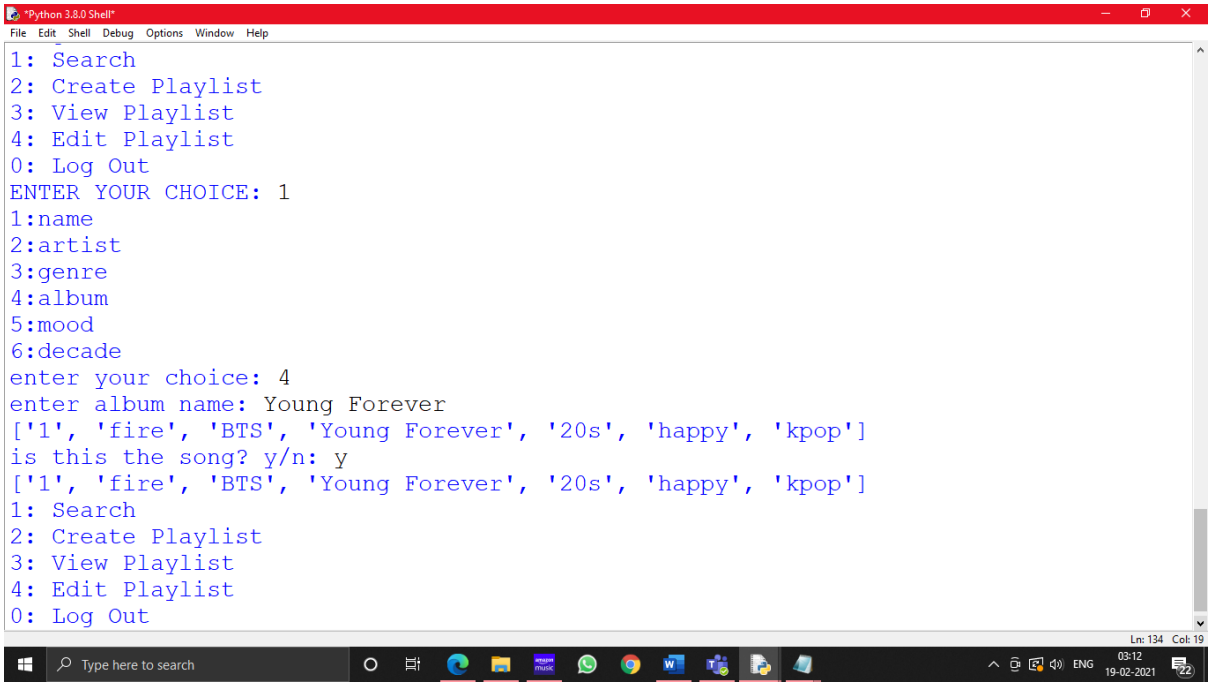
By artist



By genre

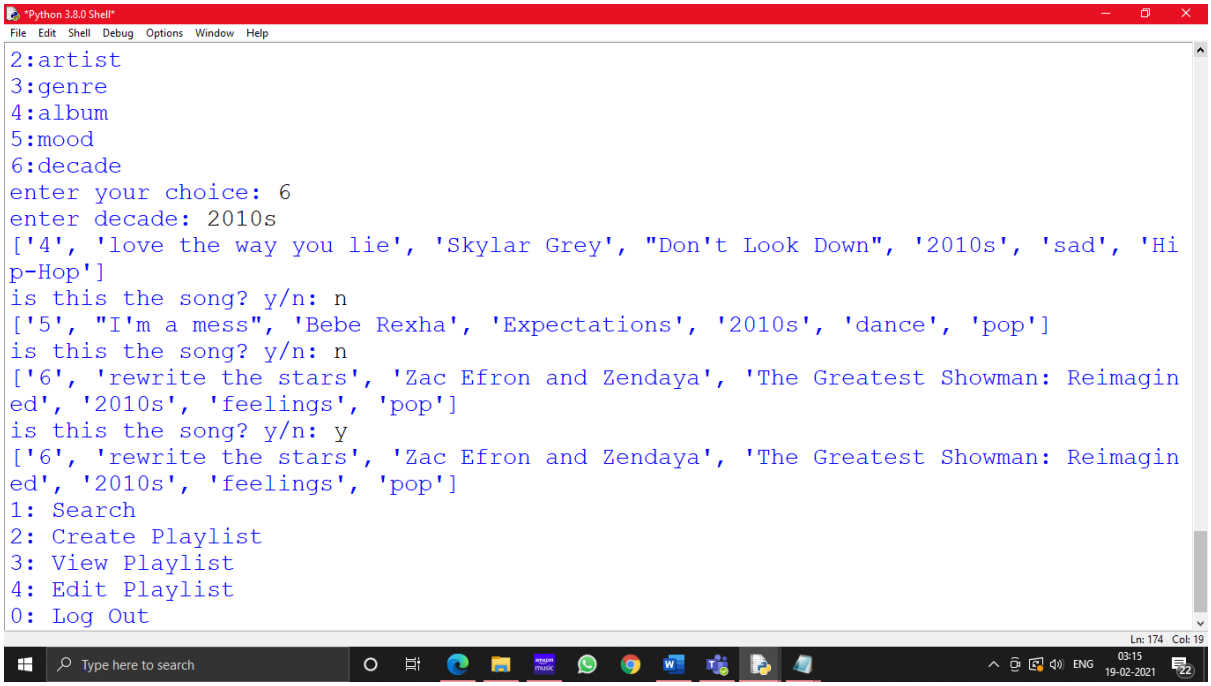


By album

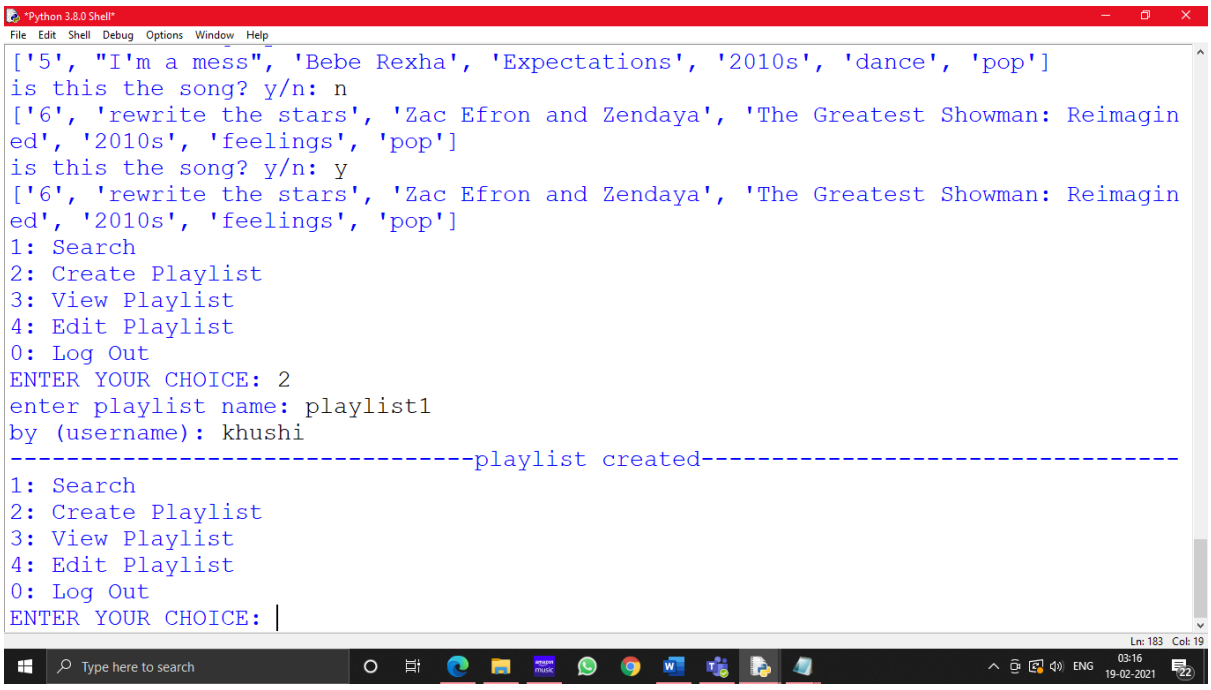


By mood

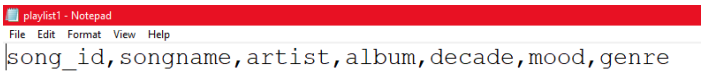
By decade



- **Creating a playlist:**

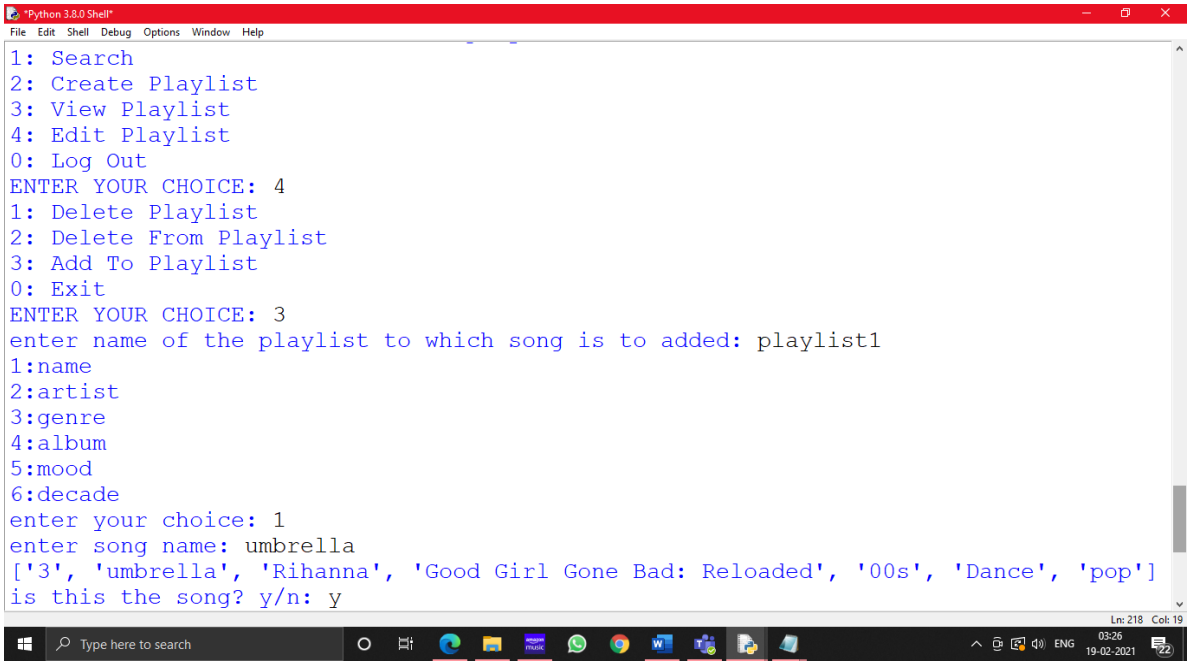


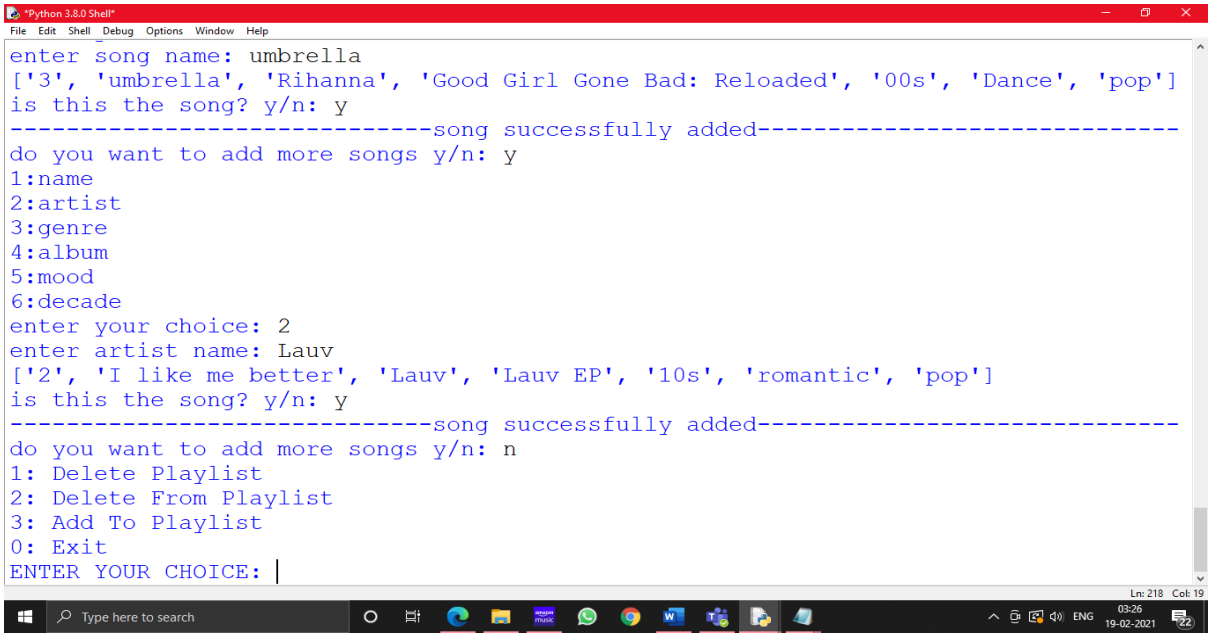
This creates a new text file with the name playlist1.txt in the current directory with following structure.



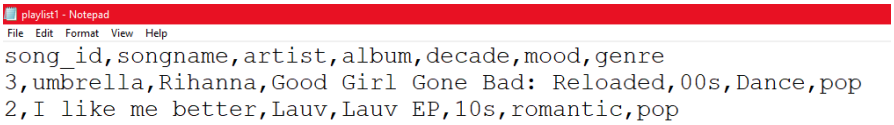
- **Editing playlist:**

  Adding songs to a playlist

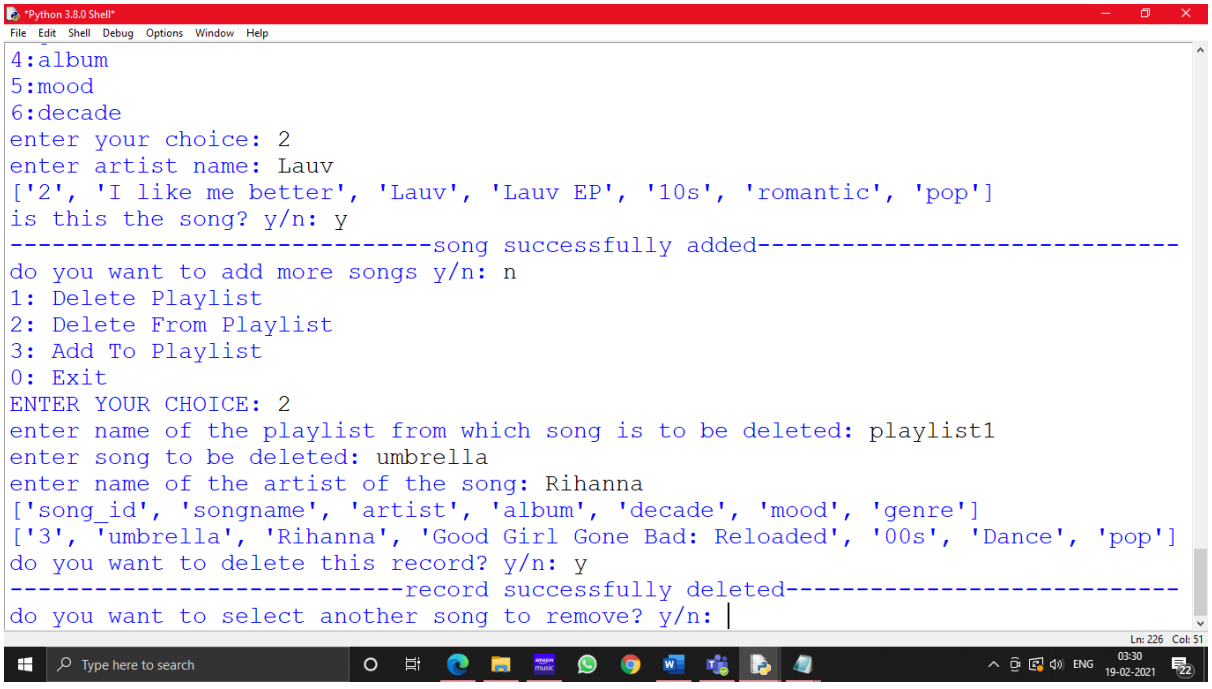




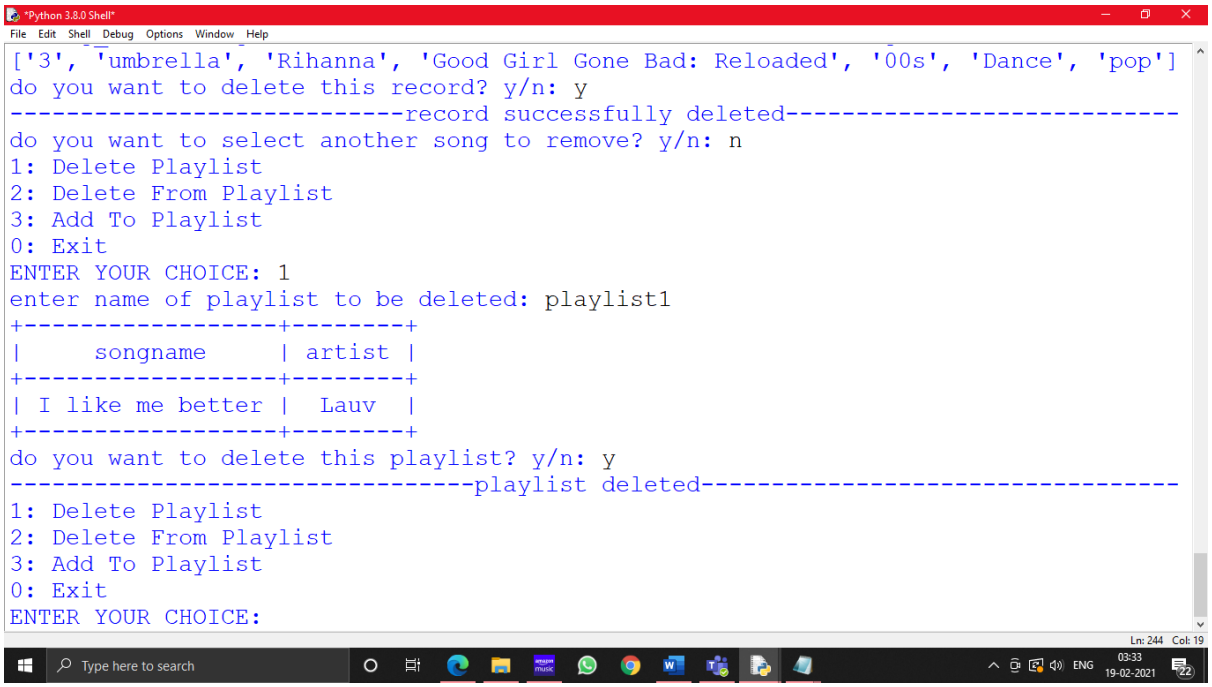
Now when we open the structure of playlist1.txt we see two added records.



Deleting from the playlist

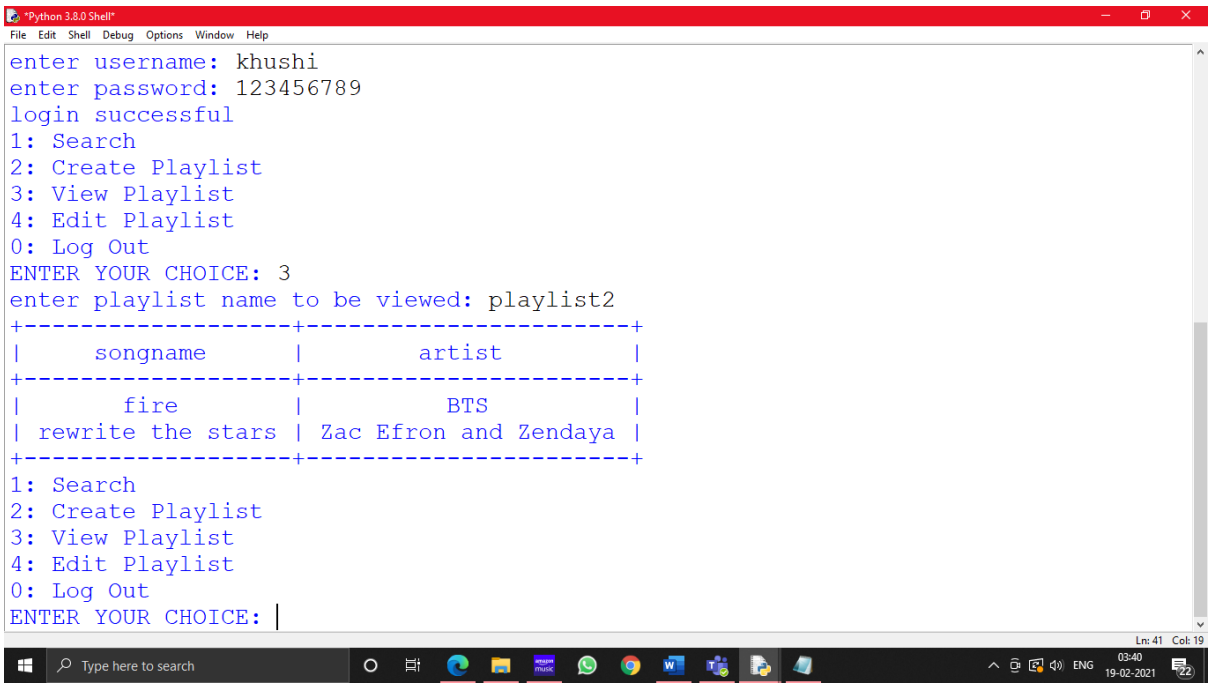


Deleting the playlist

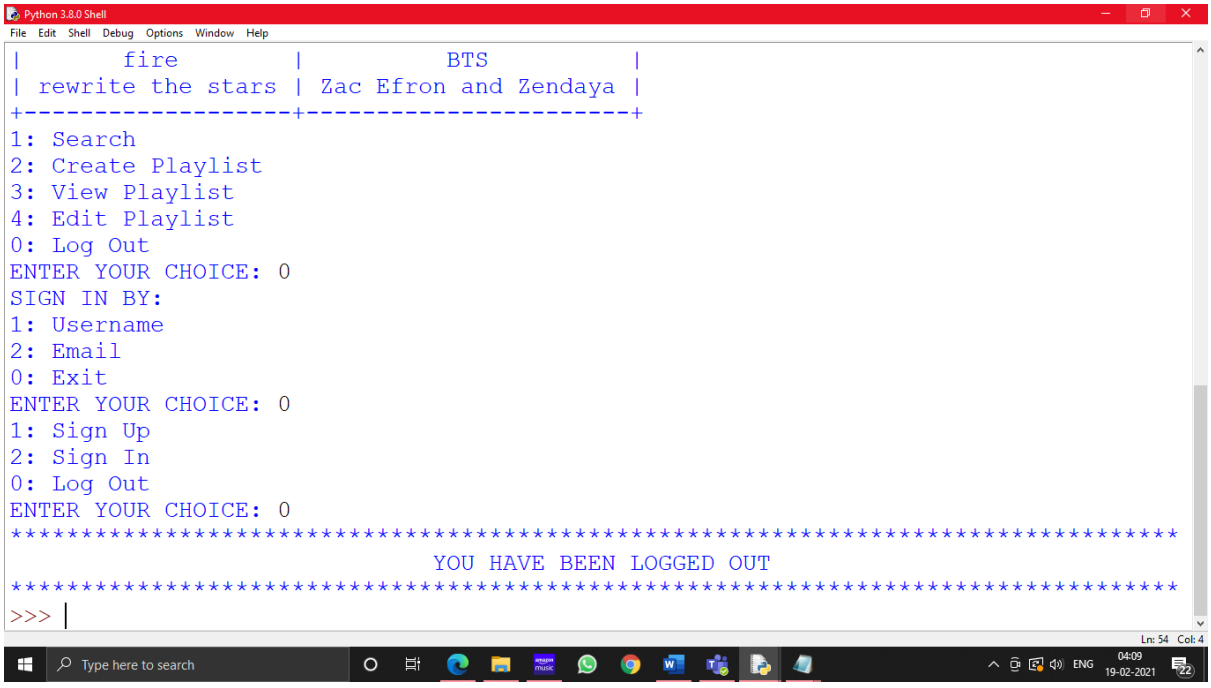


Now the file playlist1.txt is removed from the current directory

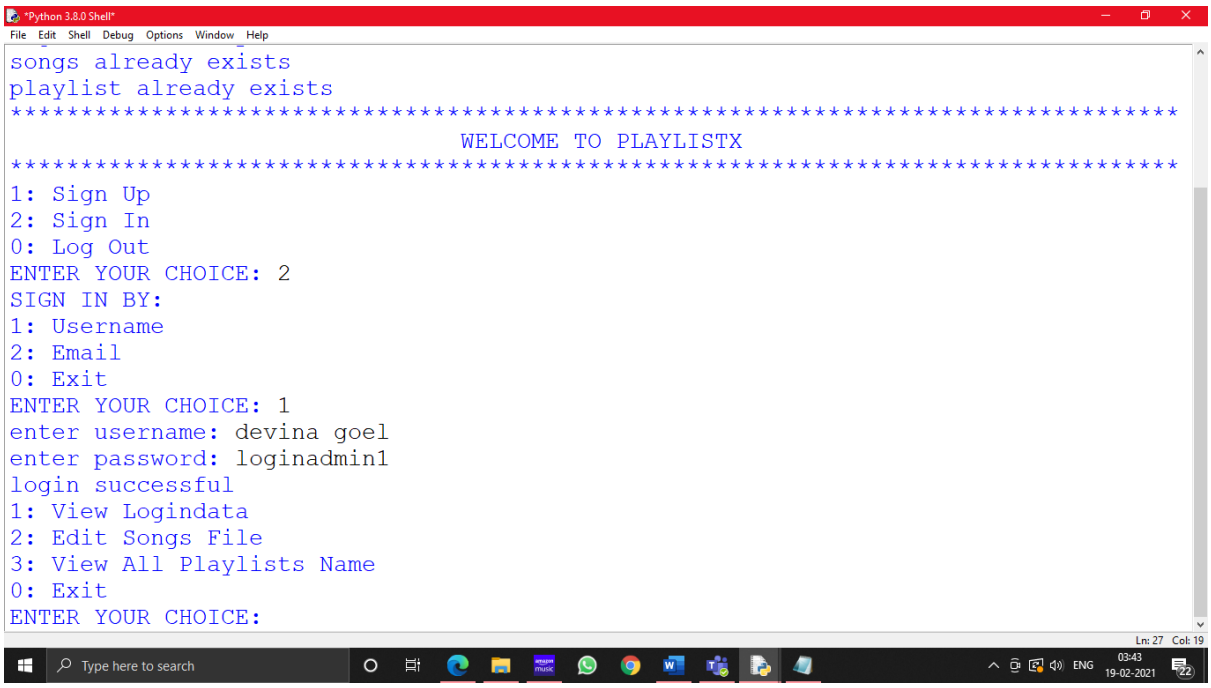
- **Viewing playlists:**



- **Logging out:**



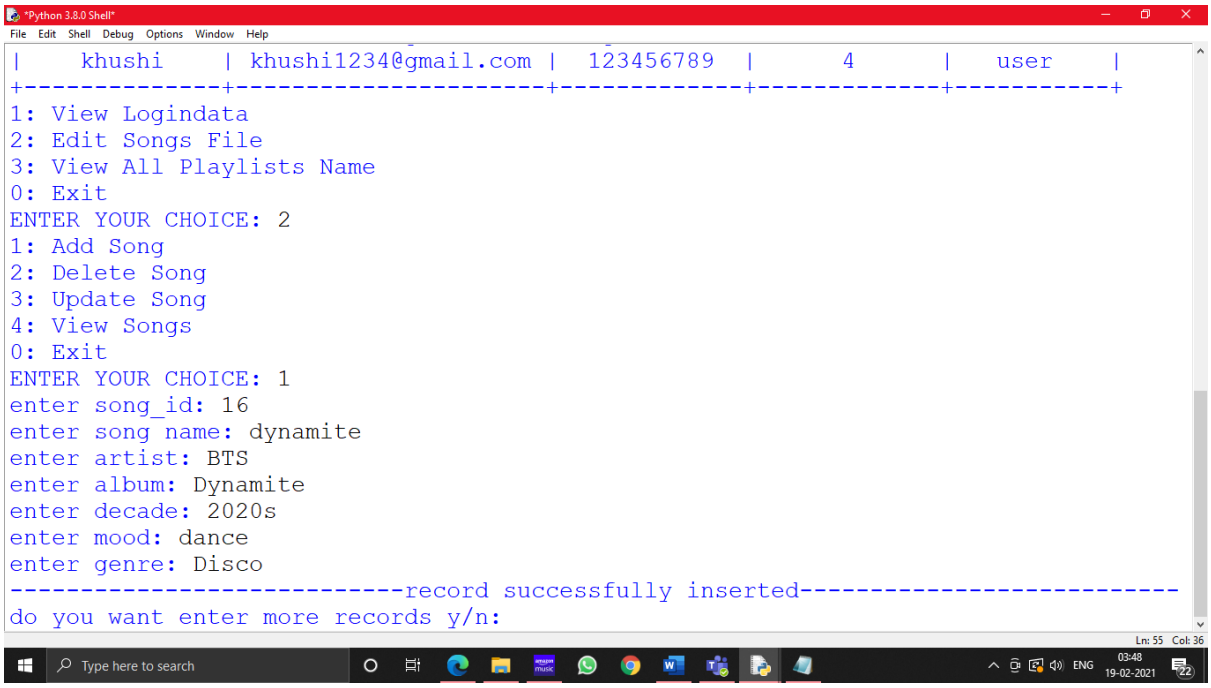
- **Signing in as admin:**



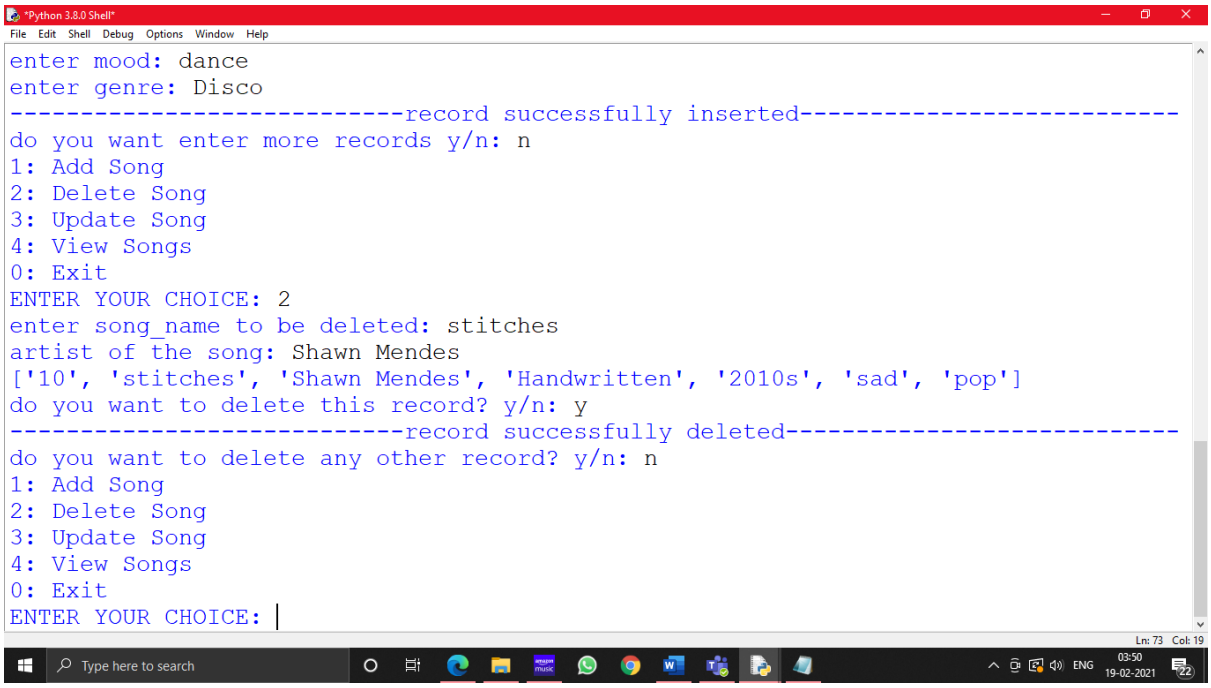
- **Viewing login data:**

- **Editing songs file:**

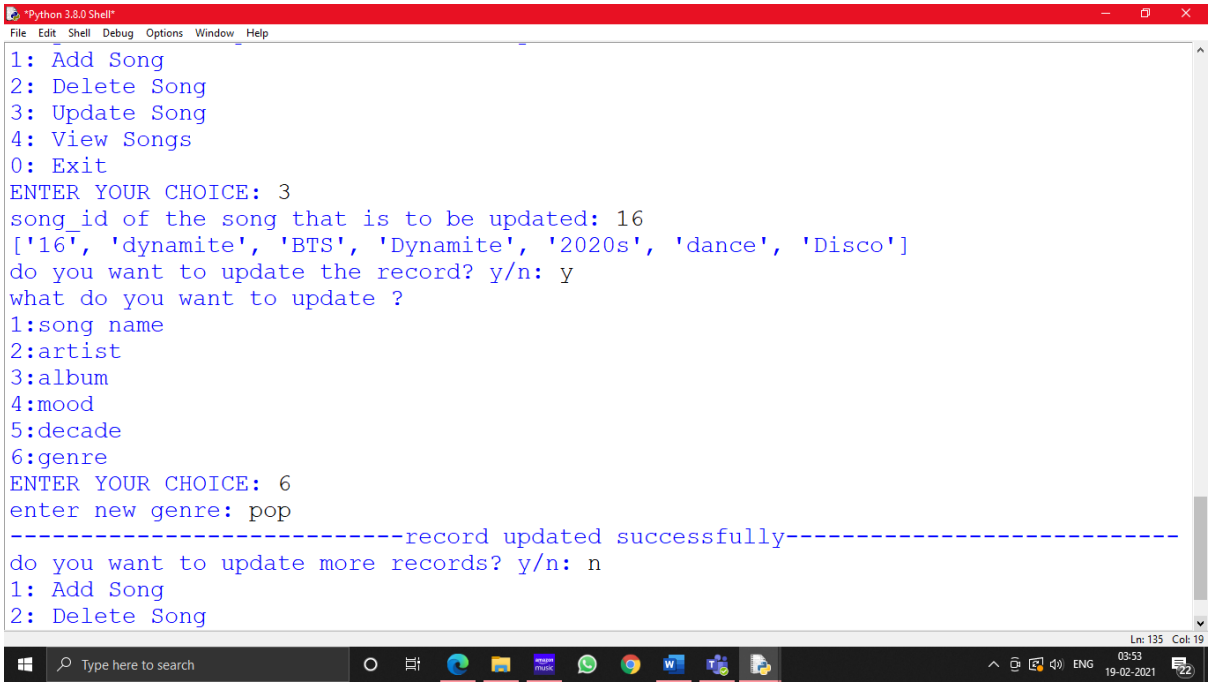
Adding a song in the songs file



Deleting a song from the songs file

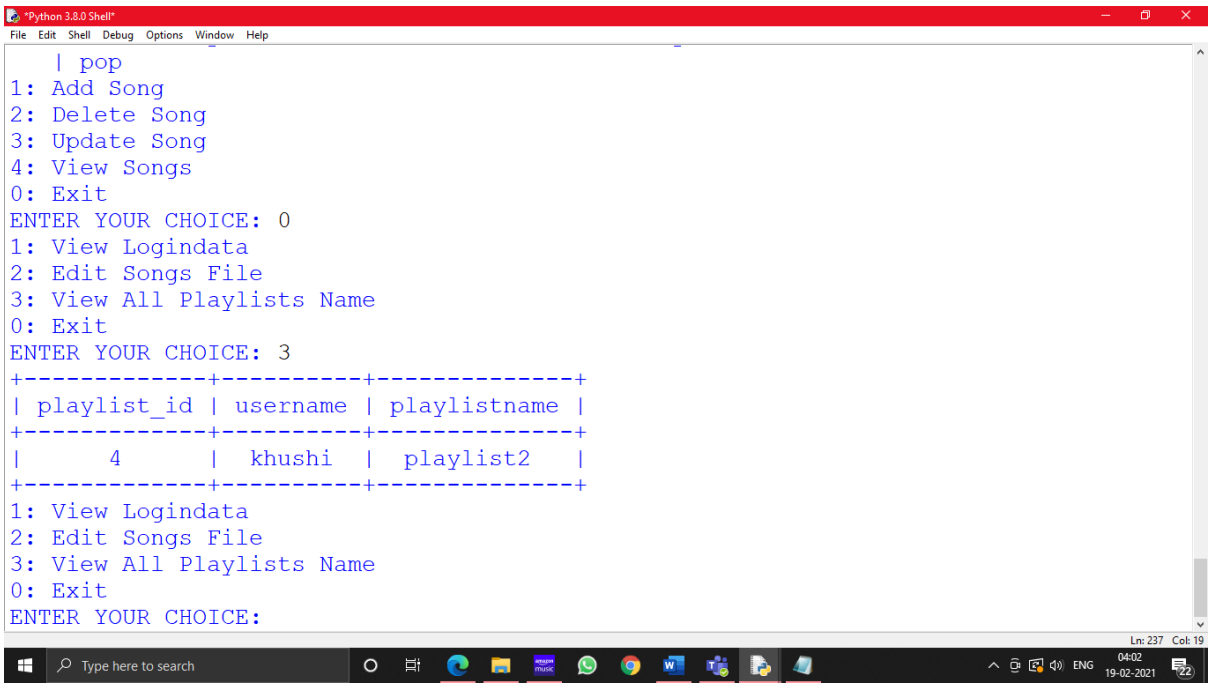


Updating a song in the songs file

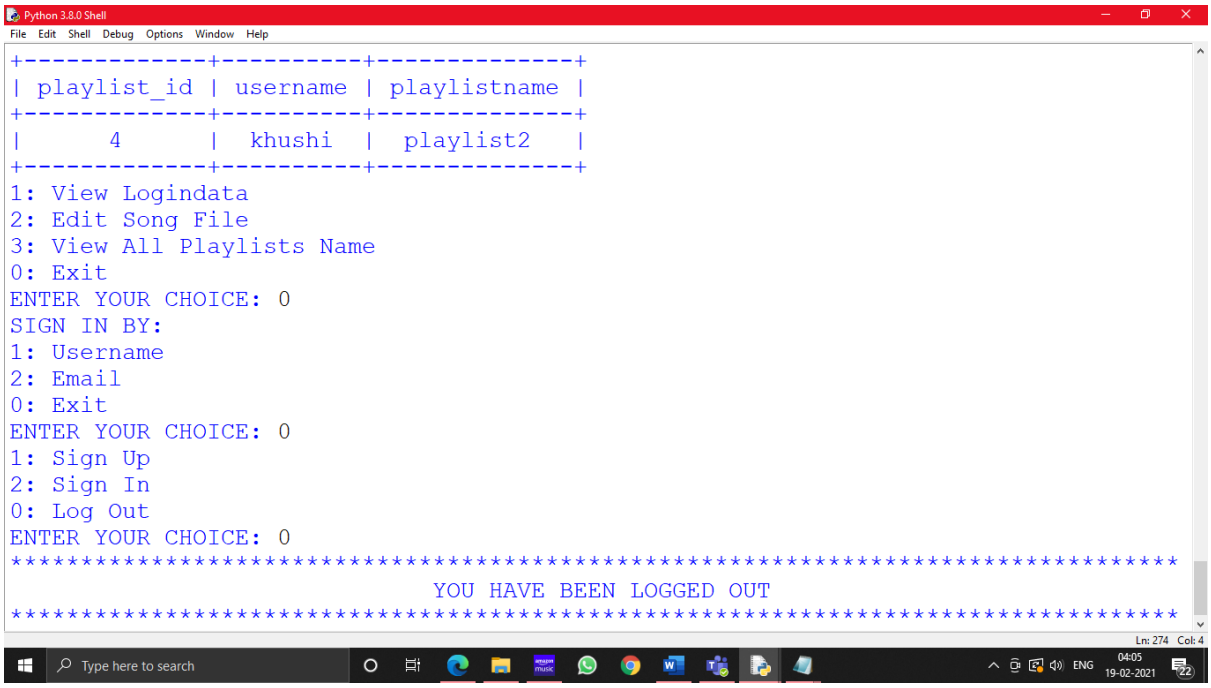


Viewing song table

- **Viewing all playlists:**



- **Logging out:**



CONCLUSION

The Playlist Maker is a software developed to provide its users an easier way of organizing their music playlists, and search for multiple songs.

The journey to make this application was indeed enlightening and meaningful which helped in putting our skills and our knowledge to test.

The scope of the project is the system on which the software is installed i.e., the project is developed as a desktop application. But the project can be later modified to operate it online.

FUTURE ENHANCEMENTS

Development of the playlist maker is on-going and there is still much to do. I and my other group members would like to add so many new and varying features in the near future to this project.

For starters converting the project to GUI and adding more options for the user to choose and make changes as they see fit to their playlists.

Addition of data security features like OTP encryption via the email provided by the user and many more is also our top priority currently. To assure the user that their data is in perfectly safe hands is a crucial part of application making.

We would also like to create our own GUI based music player to go with the application enabling the user to play their favourite playlists.

BIBLIOGRAPHY

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- GeeksforGeeks | A computer science portal for geeks
- Stack Overflow - Where Developers Learn, Share, & Build Careers
- Computer Science with Python Class XII – Sumita Arora