DOKUZ EYLÜL UNIVERSITY

COMPUTER ENGINEERING DEPARTMENT

PROJECT NAME

CME 1203 Introduction to Computer Engineering

Project Report

by

Mesut Selim SERBES, 2017510100

December 2018

IZMIR

Contents

1 Introduction

In this the project,Python program that searches movies was done.There are 8 functions in my project.I created a menu function and called all the functions in it.

1.1 Problem Definition

My program was printing multiple actors or actresses to the screen.

1.2 Solution Strategy

I used 'Set' for repeated actors or actresses. I solved my problem in this way.

2 Method

My project used the following;

-Function,Set,List

-Infinite While Loop

-Global Variable

-File Operations

3 Results

```
1. List all movies of given actor or actress
2. Given an actor or actress's name, find all the actors or actresses with whom
he/she has acted.
3. List all actors and actresses in a movie.
4. List all actors and actresses in two movies.
5. List common actors and actresses in two movies.
6. List all actors and actresses in either of the movies but not both
7. Save results to a file.
0. Exit

Select the operation you want to do between 0 and 7.
1
Enter Actor or actress's name.
WiLL SmitH
Wild Wild West
Pursuit Of Happyness
Hitch
Men In Black
I Robot
The Pursuit Of Happyness
Ali
Enemy Of The State
```

First Task

```
Select the operation you want to do between 0 and 7.
2
Enter Actor or actress's name.
Johnny depp
Helena Bonham Carter
Kate Winslet
```

Second Task

```
Select the operation you want to do between 0 and 7.
3
Enter Film's name.
the godfatheR
Al Pacino
Robert De Niro
Marlon Brando
Diane Keaton
```

Third Task

```
Select the operation you want to do between 0 and 7.
4
Enter Film's name.
grudge match
Enter the name of the other movie.
the godfather
Marlon Brando
Kim Basinger
Diane Keaton
Al Pacino
Robert De Niro
Sylvester Stallone
```

Fourth Task

```
Select the operation you want to do between 0 and 7.
5
Enter Film's name.
Breaking up
Enter the name of the other movie.
FriDa
Salma Hayek
```

Fifth Task

```
Select the operation you want to do between 0 and 7.
6
Enter Film's name.
the Godfather
Enter the name of the other movie.
grudge matcH
Kim Basinger
Al Pacino
Marlon Brando
Sylvester Stallone
Diane Keaton
```

Sixth Task

```
Select the operation you want to do between 0 and 7.
7
The operations recorded.
```

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	(first_selection)													
2	Entered value(Will Smith),Wild Wild West, Pursuit Of Happyness, Hitch, Men In Black, I Robot, The Pursuit Of Happyness, Ali, Enemy Of The State,													
3	(second_selection)													
4	Entered value(Johnny Depp),Helena Bonham Carter, Kate Winslet,													
5	(third_selection)													
6	Entered value(The Godfather),Al Pacino, Robert De Niro, Marlon Brando, Diane Keaton,													
7	(fourth_selection)													
8	Entered value(Grudge Match and The Godfather),Marlon Brando, Kim Basinger, Diane Keaton, Al Pacino, Robert De Niro, Sylvester Stallone,													
9	(fifth_selection)													
10	Entered value(Breaking Up and Frida),Salma Hayek,													
11	(sixth_selection)													
12	Entered value(The Godfather and Grudge Match),Kim Basinger, Al Pacino, Marlon Brando, Sylvester Stallone, Diane Keaton,													

Seventh Task

4 Conclusion and Discussion

In Conclusion, I understood that python language was very free.It is easier than other languages.I learned function,set,dictionary and list structures in this homework.

5 Bibliography

I took all resources from https://realpython.com/ site and documents in our lesson.

6 Appendices

6.1 Appendix A: Code and Appendix B: Screenshots

```
import csv

words=[]
global_variable=""  ###the part of used global variable for seventh selection

with open('movies.csv') as csv_file:  ###the part of reading of file.
    csv_reader = csv.reader(csv_file,delimiter=',')
    for row in csv_reader:
        words.append(row)
for i in range(len(words)):
        for j in range(len(words[i])):
            words[i][j]=words[i][j].strip().lower()
            ###the part of deleting of unnecessary space.

def menu():
    print("1. List all movies of given actor or actress")
    print("2. Given an actor or actress's name, find all the actors or actresses with whom he/she has acted.")
    print("3. List all actors and actresses in a movie.")
    print("4. List all actors and actresses in two movies.")
    print("5. List common actors and actresses in two movies.")
    print("6. List all actors and actresses in either of the movies but not both")
    print("7. Save results to a file.")
    print("0. Exit")
    print()
```

```
    deger=10
    while deger != 0:  ###I created infinite loop with 'while loop' for menu.
        try:
            deger=int(input("Select the operation you want to do between 0 and 7.\n"))
            if(deger==1):
                first_selection()
            elif(deger==2):
                second_selection()
            elif(deger==3):
                third_selection()
            elif(deger==4):
                fourth_selection()
            elif(deger==5):
                fifth_selection()
            elif(deger==6):
                sixth_selection()
            elif(deger==7):
                seventh_selection()
        except ValueError: ###I used 'try catch' for incorrectly entered value.
            print('Wrong value')

def first_selection():
    global global_variable
    global_variable+='(first_selection)\n'
    name=input("Enter Actor or actress's name.\n").lower()
    global_variable+='Entered value('+name.title()+')'+','

    for i in range(len(words)):
        for j in range(1,len(words[i])):
            if(name==words[i][0]):
                ###If it matches the actor we entered, it prints the actor or actress's movies.
                print(words[i][j].title())
                global_variable+=words[i][j].title()+', '
                ###The done operations are kept in a variable for the seventh operation.
    global_variable+='\n'


def second_selection():
    global global_variable
    my_set=set() ###I used 'set' for repetitive words in this part.
    global_variable+='(second_selection)\n'
    name=input("Enter Actor or actress's name.\n").lower()
    global_variable+='Entered value('+name.title()+')'+','

    for i in range(len(words)):
        for j in range(len(words[i])):
            if(name==words[i][0]):
                temp=words[i][j]
                for a in range(len(words)):
                    for b in range(len(words[a])):
                        if(temp==words[a][b]):
                            if(name!=words[a][0]):
                                my_set.add(words[a][0].title())
    for a in my_set:
        print(a)
        global_variable+=a.title()+', '
        ###The done operations are kept in a variable for the seventh operation.
    global_variable+='\n'

def third_selection():
    global global_variable
    global_variable+='(third_selection)\n'
    name=input("Enter Film's name.\n").lower()
    global_variable+='Entered value('+name.title()+')'+','

    for i in range(len(words)):
        for j in range(len(words[i])):
            if(name==words[i][j]):
                ###If it matches the film we entered,it prints all the actors who play in the film.
                print(words[i][0].title())
                global_variable+=words[i][0].title()+', '
                ###The done operations are kept in a variable for the seventh operation.
    global_variable+='\n'
```

```
def fourth_selection():
    global global_variable
    global_variable+='(fourth_selection)\n'
    my_set=set() ###I used 'set' for repetitive words in this part.
    name1=input("Enter Film's name.\n").lower()
    name2=input("Enter the name of the other movie.\n").lower()
    global_variable+='Entered value('+name1.title()+' and '+name2.title()+')'+','
    for i in range(len(words)):
        for j in range(len(words[i])):
            if(name1==words[i][j] or name2==words[i][j]):
                ###If it matches the films we entered,it assigns to the 'set' variable I created.
                my_set.add(words[i][0])
    for a in my_set:
        print(a.title())
        global_variable+=a.title()+', '
        ###The done operations are kept in a variable for the seventh operation.
    global_variable+='\n'

def fifth_selection():
    global global_variable
    global_variable+='(fifth_selection)\n'
    name1=input("Enter Film's name.\n").lower()
    name2=input("Enter the name of the other movie.\n").lower()
    global_variable+='Entered value('+name1.title()+' and '+name2.title()+')'+','
    for i in range(len(words)):
        temp=0
        for j in range(len(words[i])):
            if(name1==words[i][j]):
                temp+=1
            elif(name2==words[i][j]):
                temp+=1
            elif(temp==2):
                print(words[i][0].title())
                ###If the films we entered are available, the 'temp'  increases.if 'temp' is equal to 2,it prints actors or actresses.
                global_variable+=words[i][0].title()+', '
                ###The done operations are kept in a variable for the seventh operation.
                break
    global_variable+='\n'


def sixth_selection():
    global global_variable
    global_variable+='(sixth_selection)\n'
    array=[]
    name1=input("Enter Film's name.\n").lower()
    name2=input("Enter the name of the other movie.\n").lower()
    global_variable+='Entered value('+name1.title()+' and '+name2.title()+')'+','
    for i in range(len(words)):
        for j in range(len(words[i])):
            if(name1==words[i][j] or name2==words[i][j]):
                array.append(words[i][0].title())
                ###it assigns into 'list' the films we entered.
    for a in range(len(array)):
        counter=0
        temp=array[a]
        for b in range(len(array)):
            if(temp==array[b]):
                counter+=1
        if(counter==1):
            ###if temp is equal to 1,it prints only once repetitive actors or actresses.
            print(temp)
            global_variable+=temp+', '
            ###The done operations are kept in a variable for the seventh operation.
    global_variable+='\n'

def seventh_selection():   ######the part of writing of file.
    global global_variable
    output=open('output.csv','w')
    output.write(global_variable)
    print("The operations recorded.")
    output.close()



menu()
```