CSV ASSIGNMENT

Nehal
XII-D
5

 # Part A

1. Create a csv file using MS-Excel with the following data:

Name, Age, Qualification, Experience
Ananya,32,PG,8

Then, write a menu driven program to perform the following operations on the file:

(i) Append record(s) to the file
(ii) Display all the data from the file
(iii) Display all the records with Age<30
(iv) Increase the Experience of all the records by 1
(v) Delete a record with given name and age (to be input from the user).

```
create()

name,age,qual,exp['nillu',29,'ai',5]
more recordsy
name,age,qual,exp['jeeva',37,'mechanical',12
more recordsn
display()

['name', 'age', 'qualification', 'experience
['nillu', '29', 'ai', '5']
['jeeva', '37', 'mechanical', '12']
appnd()

enter new records['raina',38,'btech',2]
wanna enter more records?n
display()

['name', 'age', 'qualification', 'experience
['nillu', '29', 'ai', '5']
['jeeva', '37', 'mechanical', '12']
['raina', '38', 'btech', '2']
dispunder30()

['nillu', '29', 'ai', '5']
```

```
searchnum(29)

['nillu', '29', 'ai', '5']
```

```
>>> display()
    ['Name', 'Age', 'Qualification', 'Experience']
    ['raina', '45', 'btrch', '21']
    ['nillu', '34', 'ai', '12']
>>> inc1()
    ['Name', 'Age', 'Qualification', 'Experience']
    ['raina', '45', 'btrch', '22']
    ['nillu', '34', 'ai', '13']
>>>
```

```
>>> display()
...
    ['Name', 'Age', 'Qualification', 'Experience']
    ['raina', '45', 'btrch', '22']
    ['nillu', '34', 'ai', '13']
    ['jeeva', '39', 'mechanical', '20']
>>> delete()
...
    enter namejeeva
    enter age39
    record deleted
    ['Name', 'Age', 'Qualification', 'Experience']
    ['raina', '45', 'btrch', '22']
    ['nillu', '34', 'ai', '13']
```

```
import csv
#create
def create():
    f=open('broheyy.csv','w',newline='')
    w=csv.writer(f)
    fields = ['name','age','qualification','experience(in yrs)']
    w.writerow(fields)

    while True:
        l=eval(input('name,age,qual,exp'))
        w.writerow(l)
        ans=input('more records')
        if ans in 'Nn':
            break
    f.close()
```

A2)

```
def display():
    with open('broheyy.csv','r')as f:
        data=csv.reader(f)
        for rec in data:
            print(rec)
```

Extra q

```
def searchnum(num):
    with open('broheyy.csv','r')as f:
        data=csv.reader(f)
        c=0
        for x in data:
            if c==0:
                c+=1
            else:
                if int(x[1])==num:
                    print(x)
```

A1)

```
def appnd():
    with open('broheyy.csv','a',newline='')as f:
        w=csv.writer(f)
        while True:
            l=eval(input('enter new records'))
            w.writerow(l)
            ch=input('wanna enter more records?')
            if ch in 'Nn':
                break
```

A3)

```
def dispunder30():
    with open ('broheyy.csv','r')as f:
        data=csv.reader(f)
        c=0
        for rec in data :
            if c==0:
                c+=1
            else:
                if int(rec[1])<30:
                    print(rec)
                else:
                    pass
```

A4)

```
def inc1():
    with open('broheyy.csv', 'r', newline='') as f:
        s= list(csv.reader(f))
    with open('broheyy.csv', 'w', newline='') as f:
        w = csv.writer(f)
        row = 0
        for rec in s:
```

```
        if row == 0:
            row += 1
        else:
            rec[3] = str(int(rec[3]) + 1)
        print(rec)
        w.writerow(rec)
```

A5)

```
name=input('enter name')
age=int(input('enter age'))
with open('broheyy.csv', 'r', newline='') as f:
    s= list(csv.reader(f))
with open('broheyy.csv', 'w', newline='') as f:
    for i in range(1, len(s)):
        if s[i][0] == name and int(s[i][1]) == age:
            del s[i]
            print('record deleted ')
            break
    else:
        print('record not found')
    w = csv.writer(f)
    w.writerows(s)
 display()
```

#Part 2

A csv file is supposed to contain the following data (data only, no headings):

RNo –integer
Name – string
The Marks – float
Prac marks – float
Write a menu driven program to perform the following operations on the file:
(i) Create the file if it does not already exist
(ii) Append record(s) to the file
(iii) Display all the data from the file along with Total and Result of each student.
Total is to be calculated as Theo+Prac, Result is “PASS” if Total is above 40,
otherwise the Result is “FAIL”.
(iv) Increase the theory marks by 5 for all those students whose theory marks are
between 35 and 41 (Excluding both).
(v) Display the result summary in the following format:
Students appeared: Total number of records in the file
Max Total: Highest of total marks
Min Total: Lowest of total marks
Average Total: Average of total marks
PASS: Total number of passing students
FAIL: Total number of failed students
PASS%: (PASS/Students appeared)*100

```
>>> create()
Enter Rollno, Name, Theory marks and Practical marks:[3,'medha',39,38]
more records??y
Enter Rollno, Name, Theory marks and Practical marks:[1,'jEEVa',39,94]
more records??y
Enter Rollno, Name, Theory marks and Practical marks:[2,'nillu',98,89]
more records??n
>>> appnd()
enter new records[4,'raina',100,99]
>>> display()
['3', 'medha', '39', '38']
['1', 'jEEVa', '39', '94']
['2', 'nillu', '98', '89']
['4', 'raina', '100', '99']
>>> dispres()
['3', 'medha', '39', '38']
total 77.0
pass
['1', 'jEEVa', '39', '94']
total 133.0
pass
['2', 'nillu', '98', '89']
total 187.0
pass
['4', 'raina', '100', '99']
total 199.0
pass
```

```
appnd()
enter new records[5,'bruh',38,99]
display()
['3', 'medha', '44', '38']
['1', 'jEEVa', '44', '94']
['2', 'nillu', '98', '89']
['4', 'raina', '100', '99']
['5', 'bruh', '38', '99']
inc()
display()
['3', 'medha', '44', '38']
['1', 'jEEVa', '44', '94']
['2', 'nillu', '98', '89']
['4', 'raina', '100', '99']
['5', 'bruh', '43', '99']
summary()
Students appeared- 5
Highest score- 199
Lowest score- 82
Average total- 166.0
Total no. of students passed- 5
Total no. of students failed- 0
Pass % - 100.0
```

```
import csv
```
A1)
```
def create():
    with open("yellow.csv", "w", newline="") as f:
        w=csv.writer(f)
        while True:
            l=eval(input("Enter Rollno, Name, Theory marks and
Practical marks:"))
            w.writerow(l)
            ch=input("more records??")
            if ch in 'Nn':
                break
```

A2)
```
def display():
    with open("yellow.csv", "r") as f:
        data=csv.reader(f)
        for r in data:
            print(r)
```

A3)
```
def appnd():
    with open("yellow.csv", "a",newline='') as f:
            w=csv.writer(f)
            l=eval(input("enter new records"))
            w.writerow(l)
```
A4)
```
def dispres():
    with open("yellow.csv","r")as f:
        data=csv.reader(f)
        for rec in data:
            print(rec)
            total= float(rec[2]) + float(rec[3])
            print("total",total)
```

```
            if total>=40:
                print("pass")
            else:
                print("fail")
```

A5)

```
def inc():
    with open("yellow.csv","r")as f:
        d=list(csv.reader(f))
        for i in range(0,len(d)):
            rec=d[i]
            if int(rec[2])>35 and int(rec[2])<41:
                rec[2]=int(rec[2])+5
            with open("yellow.csv","w", newline="")as f:
                w=csv.writer(f)
                w.writerows(d)
```

A6)

```
def summary():
    with open("yellow.csv","r")as f:
        data=list(csv.reader(f))
        print("Students appeared-",len(data))
        maxt=0
        mint=100
        total=0
        t=0
        p,f =0,0
        for rec in data:
            t=int(rec[2])+int(rec[3])
            total+=t

            if t>maxt:
                maxt=t
            if t<mint:
                mint=t
```

```
        total+=t
    if t>=40:
        p+=1
    else:
        f+=1
passp= (p/len(data))*100
avgt= total/len(data)
print("Highest score-",maxt)
print("Lowest score-",mint)
print("Average total-",avgt)
print("Total no. of students passed-",p)
print("Total no. of students failed-",f)
print("Pass % -",passp)
```