**BINARY FILE HANDLING 1**

**QUESTION:**

Write a function addrec() to add record of teacher in file “Teacher.dat”. Each record should contain the following data (using list):

Teacher Name

Teacher Designation

Teacher Salary

Also write a function searchrecord() to read and display the record of a particular teacher according to the name entered by the user from a file “Teacher.dat”, add a function countrecord() to count the number of records entered and updaterecord() to update a specific record’s information and also a function deleterecord() to delete a record from the list.

**CODE:**

import pickle

def addrec(name, designation, salary):

with open("teacher.dat", "ab") as f:

pickle.dump([name, designation, salary], f)

def searchrecord(name):

with open("teacher.dat", "rb") as f:

while True:

try:

record = pickle.load(f)

if record[0] == name:

print(record)

except EOFError:

break

def countrecord():

with open("teacher.dat", "rb") as f:

count = 0

while True:

try:

rec = pickle.load(f)

count += 1

except EOFError:

break

return count

def updaterecord(oldname, name = '', designation = '', salary = ''):

with open("teacher.dat", "rb") as f:

records = []

while True:

try:

record = pickle.load(f)

if record[0] == oldname:

if designation != '':

record[1] = designation

if salary != '':

record[2] = salary

if name != '':

record[0] = name

records.append(record)

except EOFError:

break

with open("teacher.dat", "wb") as f:

for rec in records:

pickle.dump(rec, f)

def deleterecord(name):

with open("teacher.dat", "rb") as f:

records = []

while True:

try:

record = pickle.load(f)

if record[0] != name:

records.append(record)

except EOFError:

break

with open("teacher.dat", "wb") as f:

for rec in records:

pickle.dump(rec, f)

while True:

print("1. Add Record\n2. Search Record\n3. Count Record\n4. Update Record\n5. Delete Record\n6. Exit")

choice = int(input("Enter your choice: "))

if choice == 1:

name = input("Enter teacher name: ")

designation = input("Enter teacher designation: ")

salary = int(input("Enter teacher salary: "))

addrec(name, designation, salary)

print()

elif choice == 2:

name = input("Enter teacher name: ")

searchrecord(name)

print()

elif choice == 3:

print("Total records: ", countrecord())

print()

elif choice == 4:

name = input("Enter name to change: ")

choice = int(input("1. Change name\n2. Change designation\n3. Change salary\n"))

if choice == 1:

updaterecord(name, name = input("Enter new name: "))

elif choice == 2:

updaterecord(name, designation = input("Enter new designation: "))

elif choice == 3:

updaterecord(name, salary = int(input("Enter new salary: ")))

else:

print("Invalid choice")

print()

elif choice == 5:

name = input("Enter teacher name: ")

deleterecord(name)

print('Deleted record\n')

elif choice == 6:

break

else:

print("Invalid choice\n")

**OUTPUT**:

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 1

Enter teacher name: Amrith

Enter teacher designation: Teacher

Enter teacher salary: 1000

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 2

Enter teacher name: Amrith

['Amrith', 'Teacher', 1000]

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 3

Total records: 1

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 4

Enter name to change: Amrith

1. Change name

2. Change designation

3. Change salary

1

Enter new name: Allen

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 4

Enter name to change: Allen

1. Change name

2. Change designation

3. Change salary

2

Enter new designation: Head Teacher

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 4

Enter name to change: Allen

1. Change name

2. Change designation

3. Change salary

3

Enter new salary: 2000

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 5

Enter teacher name: Allen

Deleted record

1. Add Record

2. Search Record

3. Count Record

4. Update Record

5. Delete Record

6. Exit

Enter your choice: 6