**BINARY FILE HANDLING 2**

**QUESTION:**

Write a program to enter the following records in a binary file: ItemNo Integer, Item\_Name string and Price integer in the form of a dictionary. The number of records to be entered should be accepted from the user.

Include the following functions:

* Add records
* Read and display records
* Search records
* Update records
* Count records
* Delete records

**CODE:**

import pickle

keys = ["itemNo", "itemName", "price"]

def addrec(itemNo, name, price):

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

pickle.dump(dict(zip(keys, [itemNo, name, price])), f)

def searchrecord(name):

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

found = False

while True:

try:

record = pickle.load(f)

if record['itemName'] == name:

print(f'Item No: {record["itemNo"]}\nItem Name: {record["itemName"]}\nPrice: {record["price"]}')

found = True

except EOFError:

break

if not found:

print("Not Found")

def readrecord():

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

found = False

while True:

try:

record = pickle.load(f)

print(f'Item No: {record["itemNo"]}\nItem Name: {record["itemName"]}\nPrice: {record["price"]}\n')

found = True

except EOFError:

break

if not found:

print("Not Found")

def countrecord():

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

count = 0

while True:

try:

rec = pickle.load(f)

count += 1

except EOFError:

break

return count

def updaterecord(itemname, changeKey, changeValue):

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

records = []

found = False

while True:

try:

record = pickle.load(f)

if record['itemName'] == itemname:

record[changeKey] = changeValue

found = True

records.append(record)

except EOFError:

break

if not found:

print("Not Found")

return

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

for rec in records:

pickle.dump(rec, f)

def deleterecord(name):

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

records = []

found = False

while True:

try:

record = pickle.load(f)

if record['itemName'] != name:

records.append(record)

else:

found = True

except EOFError:

break

if not found:

print("Not Found\n")

return

else:

print('Deleted record\n')

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

for rec in records:

pickle.dump(rec, f)

while True:

print("1. Add Record\n2. Read and display record\n3. Search Record\n4. Update Record\n5. Count Record\n6. Delete Record\n7. Exit")

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

if choice == 1:

name = input("Enter item name: ")

no = int(input('Enter item no: '))

price = int(input('Enter price: '))

addrec(no, name, price)

print()

elif choice == 2:

readrecord()

print()

elif choice == 3:

name = input("Enter item name: ")

searchrecord(name)

print()

elif choice == 4:

name = input("Enter item name: ")

choice = int(input("1. Update item no\n2. Update item name\n3. Update price\nEnter your choice: "))

changeValue = input('Enter new value: ')

updaterecord(name, keys[choice - 1], int(changeValue) if changeValue.isdigit() else changeValue)

print()

elif choice == 5:

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

print()

elif choice == 6:

name = input("Enter item name: ")

deleterecord(name)

elif choice == 7:

break

else:

print("Invalid choice\n")

**OUTPUT**:

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 1

Enter item name: Ball

Enter item no: 1

Enter price: 10

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 2

Item No: 1

Item Name: Ball

Price: 10

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 3

Enter item name: Ball

Item No: 1

Item Name: Ball

Price: 10

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 4

Enter item name: Ball

1. Update item no

2. Update item name

3. Update price

Enter your choice: 1

Enter new value: 2

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 4

Enter item name: Ball

1. Update item no

2. Update item name

3. Update price

Enter your choice: 2

Enter new value: Bat

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 4

Enter item name: Bat

1. Update item no

2. Update item name

3. Update price

Enter your choice: 3

Enter new value: 20

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 2

Item No: 2

Item Name: Bat

Price: 20

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 5

Total records: 1

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 6

Enter item name: Bat

Deleted record

1. Add Record

2. Read and display record

3. Search Record

4. Update Record

5. Count Record

6. Delete Record

7. Exit

Enter your choice: 7