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**Code:-**

import csv import datetime import os volatile\_data = [] recovery\_image = [] def back():

# goo to back to the menu con = input("Back to Main Menu ? Y/N :") if con == "Y" or con == "y":

main\_menu() elif con == "N" or con == "n":

w = input("Warning your recovery data may loss, Are confirm to exit? Y/n :") if w == "Y" or w == "y":

exit(0) elif w == "N" or w == "n":

back() else: print("Invalid Statements ....") else:

print("Invalid Statements ....") back()

def load\_data():

# Load Data into Volatile memory so easy to work on the file. get\_temp\_data = [] with open("User\_data.csv", "r", newline='') as file:

read = csv.DictReader(file) # Load the data into List for row in read:

get\_temp\_data.append(row) return get\_temp\_data

# Main Memory Loader

if os.path.exists('User\_data.csv'): volatile\_data = load\_data() def update\_date():

get = input("Enter the card Number : ") update\_data, i = search\_data(get) volatile\_data.remove(update\_data) print("Which Part do you want to update? ") print("\n1: Card Number \n2: Name\n3: Age\n4: NRIC\n5: Amount (RM)") memory = {"1": "Card Number", "2": "Name", "3": "Age ", "4": "NRIC", "5": "Amount (RM)"}

k = input() for mem, val in memory.items(): if k == mem:

update\_data[val] = input("Enter the new " + val + " : ")

break

volatile\_data.insert(i, update\_data) with open("User\_data.csv", "w", newline='') as file:

csv\_writer = csv.DictWriter(file, fieldnames=["Card Number", "Name", "Age", "NRIC", "Amount

(RM)", "Registered Date"])

file.seek(0, 2) if file.tell() == 0:

csv\_writer.writeheader() # Write only Once csv\_writer.writerows(volatile\_data) back() def delete\_data():

danger = input("1: Remove All \n2: Remove specific data") recovery\_image = volatile\_data if danger == "1":

confirm = input("Danger, Are confirm to delete? Y/N") if confirm == "Y" or confirm == "y":

os.remove("User\_data.csv") print("Data successfully erased ! \n But you still can do back up")

back()

elif confirm == "N" or confirm == "n":

exit(0)

elif danger == "2":

select = input("Please enter the card number") delete\_data, i = search\_data(select) confirm = input("Danger, Are confirm to delete? Y/n") if confirm == "Y" or confirm == "y": recovery\_image = volatile\_data volatile\_data.remove(delete\_data) with open("User\_data.csv", "w", newline='') as file:

csv\_writer = csv.DictWriter(file, fieldnames=["Card Number", "Name", "Age", "NRIC",

"Amount (RM)","Registered Date"])

file.seek(0, 2) if file.tell() == 0:

csv\_writer.writeheader() # Write only Once csv\_writer.writerows(volatile\_data)

back()

def search\_data(card\_no):

i = 0

for data in volatile\_data: if data["Card Number"] == card\_no:

return data, i i += 1

print("Card number : " + card\_no + " data not exist !") back() def recovery\_data():

print("Data in system memory") for data in recovery\_image: print(recovery\_image) rec = input("Do you want to recover? Y/n") if rec == "Y" or rec == "y":

with open("User\_data.csv", "w", newline='') as file:

csv\_writer = csv.DictWriter(file, fieldnames=["Card Number", "Name", "Age", "NRIC", "Amount (RM)", "Registered Date"])

file.seek(0, 2) if file.tell() == 0:

csv\_writer.writeheader() # Write only Once csv\_writer.writerows(recovery\_image)

back()

def view\_data(): # View Loaded Data for data in volatile\_data:

print(data) back()

def create\_data(): temp\_data = {} unique = input("Enter Card Number : ") name = input("Enter Name : ") age = input("Enter Age : ") id = input("Enter NRIC : ") cash = float(input("Enter Deposit RM : ")) temp\_data["Card Number"] = unique temp\_data["Name"] = name temp\_data["Age"] = age temp\_data["NRIC"] = id temp\_data["Amount (RM)"] = cash x = datetime.datetime.now() temp\_data["Registered Date"] = x.strftime("%d-%m-%Y") print("Saving Data...") with open("User\_data.csv", "a", newline='') as file:

csv\_writer = csv.DictWriter(file,fieldnames=["Card Number", "Name", "Age", "NRIC", "Amount

(RM)", "Registered Date"])

file.seek(0, 2) if file.tell() == 0:

csv\_writer.writeheader() # Write only Once csv\_writer.writerow(temp\_data) back()

def main\_menu():

print(

"Welcome to Main menu \n 1: Enter Data \n 2: Update Data \n 3: Delete Data \n 4: View Data \n

5: Recover Data") opt = input("Please Choose the option : "); if opt == "1": create\_data() volatile\_data = load\_data() elif opt == "2": update\_date() volatile\_data = load\_data() elif opt == "3": delete\_data() elif opt == "4": view\_data() elif opt == "5": recovery\_data()

main\_menu()

**Output:-**

Welcome to Main menu

1: Enter Data

2: Update Data

3: Delete Data

4: View Data

5: Recover Data

Please Choose the option : 1 Enter Card Number : 2307

Enter Name : Prem Ubhe

Enter Age : 20

Enter NRIC : 222220 Enter Deposit RM : 230111

Saving Data...

Back to Main Menu ? Y/N :y

Welcome to Main menu

1: Enter Data

2: Update Data

3: Delete Data

4: View Data

5: Recover Data

Please Choose the option : 2 Enter the card Number : 2307

Card number : 2307 data not exist !

Back to Main Menu ? Y/N :y

Welcome to Main menu

1: Enter Data

2: Update Data

3: Delete Data

4: View Data

5: Recover Data

Please Choose the option : 3

1: Remove All

2: Remove specific data1

Danger, Are confirm to delete? Y/Ny

Data successfully erased !

But you still can do back up

Back to Main Menu ? Y/N :y

Welcome to Main menu

1: Enter Data

2: Update Data

3: Delete Data

4: View Data

5: Recover Data

Please Choose the option : 4

{'Card Number': '1', 'Name': 'user', 'Age': '23', 'NRIC': '231', 'Amount (RM)': '20000.0', 'Registered Date': '19-05-2020'}

Back to Main Menu ? Y/N :y

Welcome to Main menu

1: Enter Data

2: Update Data

3: Delete Data

4: View Data

5: Recover Data

Please Choose the option : 5

Data in system memory

Do you want to recover? Y/ny

Back to Main Menu ? Y/N :n

Warning your recovery data may loss, Are confirm to exit? Y/n :y

Process finished with exit code 0