

Experiment 2

Aim Write a menu-driven text application to maintain bank accounts of customers using Lists, Dictionary, Strings and Sets. This application handles error and exception using try block. The application allows following operations as python functions: i) adding and delete accounts of customers, ii) deposit and withdraw money to/from accounts, iii) list last 3 transactions on a particular accounts and iv) exit from the application.

Add a customer

In [1]:

```
cust=[]
def add_element():
    a = input("Enter the element to be added")
    cust.append(a)
    print("Customers in the bank are:",cust)
```

Delete a customer

In [2]:

```
def delete_element():
    b= input("Enter the element to be deleted: ")
    try:
        cust.remove(b)
        print("Updated customers in the bank are:",cust)
    except ValueError:
        print("Element not in the list")
```

Create a customer dictionary with all transactions

In [3]:

```
d={}
def create_dict():
    key = str(input("Enter the name of customer: "))
    value = float(input("Enter the amount details of the customer: "))
    d.setdefault(key,[]).append(value)
    print(d)
```

Deposit the money

In [4]:

```
def deposit(d):
    try:
        k=input("Enter the name of customer")
        d[k]
    except:
        print("No such customer present in the bank")
    else:
        amt= float(input("Enter the amount to be deposited:- "))
        a=d[k][-1]
        f_amt= a + amt
        d.setdefault(k, []).append(f_amt)
        print("Customer name: {name}\nCurrent amount: {amount}".format(name=k, amount=d[k][-1]))
        print(d)
```

Withdraw the money

In [5]:

```
def withdraw(d):
    try:
        k1=input("Enter the name of customer")
        d[k1]
    except:
        print("No such customer present in the bank")
    else:
        amt1= float(input("Enter the amount for withdrawal:- "))
        if (d[k1][-1] >= amt1 ):
            b= d[k1][-1]
            w_amt= b - amt1
            d.setdefault(k1, []).append(w_amt)
        else:
            print("Insufficient balance")
        print("Customer name: {name}\nCurrent amount: {amount}".format(name=k1, amount=d[k1][-1]))
        print(d)
```

Last 3 Transactions

In [6]:

```
def transaction(d):
    try:
        name= input("Enter the customer name for last 3 transactions details:- ")
        list1= d[name]
        print("Last 3 transactions are:- ", list1[-3: ])
    except:
        print("No such customer name")
```

In [7]:

```
while True:
    print("Menu Driven Program")
    print("1. Add a customer")
    print("2. Delete a customer")
    print("3. customer with all transactions")
    print("4. Deposit to account")
    print("5. Withdraw from account")
    print("6. List the last 3 transactions")
    print("7.Quit")
    choice=int(input("Enter your choice:"))
    if choice==1:
        add_element()
    elif choice==2:
        delete_element()
    elif choice==3:
        create_dict()
    elif choice==4:
        deposit(d)
    elif choice==5:
        withdraw(d)
    elif choice==6:
        transaction(d)
    elif choice==7:
        break
    else:
        print("Wrong Choice")
```

Menu Driven Program

1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
- 7.Quit

Enter your choice:1

Enter the element to be addedanam

Customers in the bank are: ['anam']

Menu Driven Program

1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
- 7.Quit

Enter your choice:1

Enter the element to be addedmush

Customers in the bank are: ['anam', 'mush']

Menu Driven Program

1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
- 7.Quit

Enter your choice:2

Enter the element to be deleted: mush

Updated customers in the bank are: ['anam']

Menu Driven Program

1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
- 7.Quit

Enter your choice:3

Enter the name of customer: anam

Enter the amount details of the customer: 3000

{'anam': [3000.0]}

Menu Driven Program

1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
- 7.Quit

Enter your choice:3

Enter the name of customer: anam

Enter the amount details of the customer: 3500

{'anam': [3000.0, 3500.0]}

Menu Driven Program

1. Add a customer
2. Delete a customer
3. customer with all transactions

```
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
7.Quit
Enter your choice:3
Enter the name of customer: mush
Enter the amount details of the customer: 4000
{'anam': [3000.0, 3500.0], 'mush': [4000.0]}
Menu Driven Program
1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
7.Quit
Enter your choice:4
Enter the name of customer:anam
Enter the amount to be deposited:- 500
Customer name: anam
Current amount: 4000.0
{'anam': [3000.0, 3500.0, 4000.0], 'mush': [4000.0]}
Menu Driven Program
1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
7.Quit
Enter your choice:5
Enter the name of customer:anam
Enter the amount for withdrawal:- 50
Customer name: anam
Current amount: 3950.0
{'anam': [3000.0, 3500.0, 4000.0, 3950.0], 'mush': [4000.0]}
Menu Driven Program
1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
7.Quit
Enter your choice:6
Enter the customer name for last 3 transactions details:- anam
Last 3 transactions are:- [3500.0, 4000.0, 3950.0]
Menu Driven Program
1. Add a customer
2. Delete a customer
3. customer with all transactions
4. Deposit to account
5. Withdraw from account
6. List the last 3 transactions
7.Quit
Enter your choice:7
```