

29/06/24

Lab-5

Develop a Java program to create a class Bank that maintains two kinds of account for its customer, one called savings account.

```
#import java.util.Scanner;
```

```
class Account{
```

```
    String customerName;  
    String accountNumber;  
    String accountType;  
    double balance;
```

```
    Account(String customerName, String accountNumber,  
            String accountType, double balance)  
    {
```

```
        this.customerName = customerName;
```

```
        this.accountNumber = accountNumber;
```

```
        this.accountType = accountType;
```

```
        this.balance = balance;
```

```
    }
```

```
    void deposit(double amount)  
    {
```

```
        balance += amount;
```

```
        System.out.println("Deposit successful.
```

```
Updated balance: " + balance);
```

```
    }
```

```
    void displayBalance()  
    {
```

```
        System.out.println("Account Type: " + accountType);
```

```
        System.out.println("Customer Name: " + customerName);
```

```
        System.out.println("Account Number: " + accountNumber);
```

```
        System.out.println("Balance: " + balance);
```

```
class SavAcc extends Account {
    SavAcc(String customerName, String accountNumber,
        double balance)
    {
        super(customer
```

```
void withdrawal()
{
    System.out.println("Enter withdrawal amount");
    int with = sc.nextInt();
    if (with > balance)
    {
        System.out.println("Insufficient Balance");
    }
    else {
        balance = with;
    }
}
```

```
void applyInterest()
```

```
package java-lab;
public class Cur-acc extends Account {
    Cur-acc (String CustomerName, int accountNumber,
        String account type)
    {
        super (customer Name, Account Number, Account type);
    }
}
```

```
void withdrawal()
{
    System.out.println("Enter withdrawal amt.");
    int with = sc.nextInt();
    if (balance <= 2000)
```

```
double pen = balance/6.06;
System.out.println("Insufficient balance penalty to be paid");
```



balance += pen;

else {

balance = with;

}

}

}

package java-lab;

public class Sav\_account extends Account {

Sav\_acct (String CustomerName, AccountNum, accounttype)

{

super (Customer Name, Account Number, account type);

}

void applyInterest()

{

System.out.println("Enter interest rate");

int rate = sc.nextInt();

double interest = balance \* (rate/100);

balance += interest;

System.out.println("Balance after interest : " + balance);

}

}

package java-lab;

import java.util.Scanner;

public class Book

{

public static void main (String args[])

{

Scanner sc = new Scanner (System.in);

System.out.println("Enter customer name");

String CustomerName = sc.nextLine();

System.out.println("Enter account number");

int accNum = sc.nextInt();

System.out.println("Enter account type")

Account ca = new

Acc\_acct (Customer Name, Account Num, Current account)

Account So = new  
 sav.acct (Customer Name, account number, "Savings account");

int choice;

while (true)

{

System.out.println("1. Deposit In 2. Withdrawal In

3. Compute Interest In 4. Display);

choice = sc.nextInt();

switch (choice)

{

case 1:

System.out.println("Enter the type of account:  
 In 1. Savings In 2. Current");

int acc = sc.nextInt();

if (acc == 1)

{

so.deposit();

}

else {

ca.deposit();

}

break;

Case 2:

System.out.println("Enter type of account:");

int acc = sc.nextInt();

if (acc == 1)

{

so.withdrawal();

}

else

{

ca.withdrawal();

}

break;



case 3:

sa. applyInterest();

break;

case 4:

System.out.println("1. Savings\n2. Current");

int acc2 = sc.nextInt();

if (acc2 == 1)

{

sa.display();

}

else

ca.display();

}

break;

}

}

}

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Output:

Enter Customer Name: Sindhuja

Enter Acc No : 12345

B. - Menu -

1. Deposit

2. Withdrawal

3. Compute interest

4. Display

1

Enter 1. Savings 2 Current

1

Enter amount 5000

Enter your choice

2

Enter 1. Savings 2. Current

1

Enter amount: 2000

Balance amt: 3000

- Menu -

1. Deposit

2. Withdrawal

3. Compute interest

4. Display

4.

1. Savings 2. Current

1.

Customer name: Sindhuja

Acc No : 12345

Balance: 3000