

Lab program 5

CLASSMATE

Date _____

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- + Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called savings account. The account provides compound interest and withdraw facilities but no interest. Current account holders should also maintain a minimum balance and if the balance falls below this level, a service charge is imposed.
- + Accept deposit from customer & update the balance.
- + Display the balance.
- + Compute and deposit interest
- + Permit withdrawal and update the balance
- + check for the minimum balance, impose penalty if necessary & update the balance.

import java.util.Scanner;

```
abstract class Account {  
    String customerName;  
    long accountNumber;  
    String accountType;  
    double balance;
```



```
public Account (String customername, long accountNumber,  
String accounttype, double balance)  
{
```

```
    this.customername = customername;  
    this.accountNumber = accountNumber;  
    this.accounttype = accounttype;  
    this.balance = balance;  
}
```

```
public void displayBalance () {  
    System.out.println("Account balance : ₹" + balance);  
}
```

```
// public method for withdrawal  
public abstract void withdraw (double amount);  
{
```

```
class Current extends Account {  
    double minimumBalance;  
    double servicecharge;  
}
```

```
public Current (String customername, long  
accountNumber, double balance) {  
    super(customername, accountNumber, balance);  
    this.minimumBalance = 1000;  
    this.servicecharge = 50;  
}
```



```

public void withdraw (double amount) {
    if (balance - amount >= minimumBalance) {
        balance -= amount;
        System.out.println("withdraw successful");
    }
}

```

```

    else {
        System.out.println("Insufficient funds.");
    }
}

```

```

class Savings extends Account {
    double interest;
}

```

```

public void withdraw (double amount) {
    if (balance - amount >= 0) {
        balance -= amount;
        System.out.println("withdraw success");
    }
    else {
        System.out.println("Insufficient balance");
    }
}

```

```

public class Bank {
    public static void main (String[] args) {
        Scanner scanner = new Scanner(System.in);
    }
}

```



```
system.out.println("name");  
String name = scanner.nextLine();
```

```
system.out.println("no");  
String no = scanner.nextLine();
```

```
system.out.println("Enter the balance");  
double initialBalance = scanner.nextDouble();
```

```
Account account;
```

```
int choice;  
do {
```

```
    system.out.println("1. Deposit");  
    system.out.println("2. Display Balance");  
    system.out.println("3. Deposit interest");  
    system.out.println("4. Withdrawal");  
    system.out.println("5. Exit");  
    choice = scanner.nextInt();
```

```
    switch (choice) {
```

```
        case 1:
```

```
            system.out.print("Enter deposit amount: ");  
            double depositAmount = scanner.nextDouble();  
            ?
```

```
        else {
```


system.out.println("This option is applicable for
savings only");

break;

case 2:

account.displayBalance();

break;

case 3:

if (account instanceof SavingsAccount) {

System.out.println("Enter account deposit interest");

} else {

System.out.println("This is invalid");

break;

case 4:

System.out.println("Enter withdrawal amount");

double withdrawalAmount = scanner.nextDouble();

break;

case 5:

System.out.println("Exiting program. Goodbye");

break;

}

while (choice != 6);

scanner.close();

}

Output:-

Enter customer name: Rohit

Enter account no: 1234768

Enter initial balance: 500

1: Deposit

2: Display Balance

3: Withdraw

4: Exit

Enter choice: 1

Enter deposit amount: 2500

Enter choice: 2

Account Balance: 3000.0

Enter choice: 3

Enterest deposited. Updated balance: 5500.0

choice: 4

Exiting program. Goodbye!

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