

LAB 5

```
import java.util.Scanner;

class Account {
    String cName, accNum, accType;

    public static final String ANSI_RED
    public static final String ANSI_GREEN
    public static final String ANSI_RESET;

    Scanner sc = new Scanner(System.in);

    Account(String name, String accNo, String accType) {
        this.cName = name;
        this.accNum = accNo;
        this.accType = accType;
    }

    Account() {}
}

class CurrentAcc extends Account {
    double balance = 5000, rate = 0.06;
    int time = 5;
    private boolean canWithdraw = false;

    CurrentAcc(String name, String accNo, String accType) {
        super(name, accNo, accType);
        System.out.println("New customer: " + cName);
    }
}
```

```

void getBalance() {
    System.out.format("Your balance: %.f \n", balance);
}

```

```

void deposit(double amount) {
    char choice;

    System.out.println("Deposit Account holder: " +
        cName + " Amount: " + amount);

    System.out.println("Approve Deposit? (Y/N):");
    choice = sc.next().charAt(0);
    if (choice == 'Y' || choice == 'y') {
        balance += amount;
        System.out.println(ANSI_GREEN + "Deposit
        - Approved. Updated balance: " + balance + ANSI_RESET);
    }
}

```

```

void withdraw(double amount) {
    char choice;

    if (this.canWithdraw()) {
        if (balance < amount) {
            System.out.println("Account balance is lower -
            - than amount to be withdrawn");
            return;
        }
        System.out.println("Approve " + cName + "'s request for
        - withdraw? (Y/N):");
    }
}

```

```
choice = sc.next().charAt(0);
```

```
if (choice == 'v' || choice == 'y') {
```

```
    balance -= amount
```

```
    System.out.println(ANSI_GREEN + "With drawl-
```

```
-Approved. Update balance: " + balance + ANSI_RESET
```

```
}
```

```
}
```

```
void checkMinAmount() {
```

```
    if (balance < 3000) {
```

```
        balance = -500;
```

```
        System.out.println(ANSI_RED + "Balance under
```

```
minimum amount has to be maintained." +
```

```
ANSI_RESET);
```

```
}
```

```
}
```

```
}
```

```
Public class Prog2 {
```

```
    public static void main(String[] args) {
```

```
        int c;
```

```
        double temp;
```

```
        String name, accNo, accType;
```

```
        Scanner sc = new Scanner(System.in);
```

```
        System.out.println("Enter Name:");
```

```
        name = sc.nextLine();
```



```
System.out.println("Enter account number:");  
accNO = sc.nextLine();
```

```
System.out.println("Enter Account type:");
```

```
accType = sc.nextLine();
```

```
if (accType.charAt(0) == 'c') {
```

```
    currentAcc a = new CurrentAcc(name, accNO, accType);
```

```
while (true) {
```

```
    System.out.println("1. Deposit money\n2. withdraw -  
- money\n3. Display money\n4. Exit");
```

```
    c = sc.nextInt();
```

```
    switch(c) {
```

```
        case 1: System.out.println("Enter amount to be  
deposited:");
```

```
            temp = sc.nextDouble();
```

```
            a.checkMinAmount();
```

```
            break;
```

```
        case 2: System.out.println("Enter amount to  
be withdraw:");
```

```
            temp = sc.nextDouble();
```

```
            a.checkMinAmount();
```

```
            break;
```

```
case 3: a.getBalance();  
break;
```

```
case 4: system.exit(0);  
break;
```

```
default: System.out.println("Enter the correct Option");
```

```
}
```

```
}
```

```
}
```

```
else if (accType.charAt(0) == 's') {  
    Savings Acc a = new SavingAcc(name, accNo,  
                                     accType);
```

```
while (true) {
```

```
    System.out.println("1. Deposit money\n2. withdraw -  
    money\n3. Display money\n4. Exit");
```

```
    c = sc.nextInt();
```

```
    switch (c) {
```

```
case 1: System.out.println("Enter amount to be  
        deposited:");
```

```
    temp = sc.nextDouble();
```

```
    a.deposit(temp);
```

```
    a.calcInterest();
```

```
    a.checkMinAmount();
```

```
    break;
```

case 2: System.out.println("Enter the amount to
be withdrawn:");

temp = sc.nextDouble();

a.withdraw(temp);

a.calcInterest();

a.checkMinAmount();

break;

case 3: a.getBalance();

break;

case 4: System.exit(0);

break;

}

default: System.out.println("Enter the correct
options");

}

}

}

else {

System.out.println("Enter valid type. Exiting");

}

}

}