

Lab 5

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```
import java.util.Scanner;
class account
{
```

```
    String acc-name;
    int acc-num;
    String acc-type;
    double balance;
}
```

```
class sav-acct extends account
{
```

```
    Scanner sc = new Scanner(System.in);
    double emp;
    sav-acct()
    {
```

```
        System.out.println("Enter the account name:");
        acc-name = sc.next();
        System.out.println("Enter the account number:");
        acc-num = sc.nextInt();
        System.out.println("Enter the balance:");
        balance = sc.nextDouble();
    }
}
```

```
void deposit()
{
```

```
    double amt;
    System.out.println("Enter the amount to deposit:");
    amt = sc.nextDouble();
    balance += amt;
}
}
```

```
void cmp_int()
{
```

```
    int time;
```

```
    System.out.println("Enter the time period elapsed");
```

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

```
    System.out.println("Enter the rate of C/I");
```

```
    int rate = sc.nextInt();
```

```
    cmp = balance;
```

```
    balance = balance * (Math.pow(1 + (rate * 0.01), time));
```

```
    cmp = balance - cmp;
```

```
    System.out.println("Compound Interest: " + cmp);
```

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

```
}
```

```
void withdraw()
```

```
{
```

```
    double amt;
```

```
    System.out.println("Enter the amount to be  
withdrawn");
```

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

```
    if (balance >= amt)
```

```
{
```

```
        balance -= amt;
```

```
        System.out.println("Your amount after  
withdrawal is: " + balance);
```

```
}
```

```
    else
```

```
{
```

```
        System.out.println("The given amount cannot  
be withdrawn");
```

```
}
```

```
}
```



```
void disp()
```

```
{
```

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

```
}
```

```
}
```

```
class cur-acc extends account
```

```
{
```

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

```
double min-bal;
```

```
double penalty;
```

```
cur-acc()
```

```
{
```

```
System.out.println("Enter the account name:");
```

```
acc-name = sc.next();
```

```
System.out.println("Enter the account number:");
```

```
acc-num = sc.nextInt();
```

```
System.out.println("Enter the balance:");
```

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

```
}
```

```
void deposit()
```

```
{
```

```
double amt;
```

```
System.out.println("Enter the amount to deposit:");
```

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

```
balance += amt;
```

```
}
```

```
void minimum()
```

```
{
```

```
System.out.println("Enter the minimum balance  
allowed and service charge percentage");
```

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

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

```
if (balance < min_bal)
```

```
{
```

```
System.out.println("Your balance is less  
than minimum amount");
```

```
balance = balance - ((min_bal - balance) * penalty * 0.01);
```

```
System.out.println("Your new total balance  
is" + balance);
```

```
}
```

```
void withdrawl()
```

```
{
```

```
double amt;
```

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

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

```
if (balance >= amt)
```

```
{
```

```
balance -= amt;
```

```
System.out.println("Your amount after  
withdrawl is" + balance);
```

```
}
```

```
else {
```

```
System.out.println("The given amount  
cannot be withdrawl");
```

```
}
```

```
}
```



```
void disp()
```

```
{
```

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

```
}
```

```
}
```

```
class accMain
```

```
{
```

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

```
{
```

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

```
        System.out.println("Enter the account type  
write 1 for savings and 2 for current");
```

```
        int acc_type = sc.nextInt();
```

```
        if (acc_type == 1)
```

```
{
```

```
            sav-act o2 = new sav-act();
```

```
            while (true)
```

```
{
```

```
                System.out.println("1. Deposit \n 2. Display  
Balance \n 3. Withdraw Amount \n 4. Check  
for Compound Interest");
```

```
                int choice = sc.nextInt();
```

```
                switch (choice)
```

```
{
```

```
                    case 1: o2.deposit();
```

```
                        break;
```

```
                    case 2: o2.disp();
```

```
                        break;
```

```
                    case 3: o2.withdraw();
```

```
                        break;
```

```
                    case 4: o2.comp_int();
```

```
                        break;
```

```

        default: System.exit(0);
    }
}
}
else if (acc_type == 2)
{
    curr_acc_03 = new curr_acc();
    while (true)
    {
        System.out.println("1. Deposit\n2. Display balance\n3. Withdraw Amount\n4. Check for minimum balance and penalty");
        int choice = sc.nextInt();
        switch (choice)
        {
            case 1: 03.deposit();
                    break;
            case 2: 03.disp();
                    break;
            case 3: 03.withdrawal();
                    break;
            case 4: 03.minimum();
                    break;
            default: System.exit(0);
        }
    }
}
}
}
}

```