```java
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 cmp;
    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 CI");
        int rate=sc.nextInt();
        cmp=balance;
        balance=balance*(Math.pow((1+(rate*0.01)),time));
        cmp=balance-cmp;
        System.out.println("Compound Interest:"+cmp);
```

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        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        System.out.println("Enter the amount to be withdrawn:");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 withdrawl is:
"+balance);
        }
        else
        {
            System.out.println("The given amount cannot be
withdrawn");
        }
    }
    void disp()
    {

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

}
class curr_acc extends account
{
    Scanner sc=new Scanner(System.in);
    double min_bal;
    double penalty;
    curr_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:");
```

```java
        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
the 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 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 withdrawl is:
"+balance);
        }
        else
        {
            System.out.println("The given amount cannot be
withdrawn");
        }
```

```java
        }
    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_acct o2=new sav_acct();
              while(true)
              {
                    System.out.println("1.Deposit\n 2.Display
Balance\n 3.Withdraw Amount\n 4.Check for compound interest
5.Exit");
                int choice=sc.nextInt();
                switch(choice)
                {
                    case 1:o2.deposit();
                    break;
                    case 2:o2.disp();
                    break;
                    case 3:o2.withdraw();
                    break;
                    case 4:o2.cmp_int();
                    break;
                    default:System.exit(0);
                }
                }

            }
        else if(acc_type==2)
```

```java
		{
			curr_acc o3=new curr_acc();
			while(true)
			{
				System.out.println("1.Deposit\n 2.Display
Balance\n 3.Withdraw Amount\n 4.Check for minimum balance and
penalty");
				int choice=sc.nextInt();
				switch(choice)
				{
					case 1:o3.deposit();
					break;
					case 2:o3.disp();
					break;
					case 3:o3.withdraw();
					break;
					case 4:o3.minimum();
					break;
					default:System.exit(0);
				}
			}
		}

	}
}
```

```
[Ishas-MacBook-Air:~ isha$ cd Documents/java/
Ishas-MacBook-Air:java isha$ javac lab5.java
Ishas-MacBook-Air:java isha$ java accMain
Enter the account type, write 1 for savings and 2 for current:
1
Enter the account name:
Isha
Enter the account number:
123
Enter the balance:
2000

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for compound interest 5.Exit
1
Enter the amount to deposit:
200

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for compound interest 5.Exit
2
balance amount:2200.0

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for compound interest 5.Exit
3
Enter the amount to be withdrawn:
500
Your amount after withdrawl is: 1700.0

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for compound interest 5.Exit
4
Enter the time period elapsed:
```

```
2000

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
1
Enter the amount to deposit:
600

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
2
balance amount:2600.0

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
3
Enter the amount to be withdrawn:
1700
Your amount after withdrawl is: 900.0

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
4
Enter the minimum balance allowed and the service charge perce
ntage
1200 5
Your balance is less than minimum amount
Your new total balance is885.0

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
```

```
Enter the time period elapsed:
4
Enter the rate of CI
8
Compound Interest:612.8312320000005
Balance after depositing interest:2312.8312320000005

1.Deposit
 2.Display Balance
 3.Withdraw Amount
[ 4.Check for compound interest 5.Exit                          ]
5
Ishas-MacBook-Air:java isha$ java accMain
Enter the account type, write 1 for savings and 2 for current:
2
Enter the account name:
Isha
Enter the account number:
456
Enter the balance:
2000

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
1
Enter the amount to deposit:
600

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
2
balance amount:2600.0

1.Deposit
 2.Display Balance
 3.Withdraw Amount
 4.Check for minimum balance and penalty
3
```