

- Q) WAP to create class Bank that maintain two kinds of account for its customers, one called savings accounts and other called current account. Savings account provides compound interest and withdrawal facilities but no cheque book facility. The current accounts provide cheque book facility but not interest. Current account holder should also maintain a minimum balance and if the balance falls below this level a penalty charge is imposed.

Create a class account that stores customer name, acc. num and type of account.

From this derive the classes Cur-acc and Sav-acc to make them more specific to their requirements. Include the necessary Methods in order to achieve the following tasks.

- @ Accept deposit from customer and 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 and update the balance.

```
=> public class Bank {
```

```
    static class Account {
```

```
        String customer_name;
```

```
        String account_number;
```

```
        String account_type;
```

```
        double balance;
```

```
        Account (String cn, String an, String at, 0double b) {  
            customer_name = cn;  
            account_number = an;  
            account_type = at;  
            balance = 0;  
        }
```

```
        public void deposit (double amt) {
```

```
            balance += amt;
```

```
            System.out.println("Amount in balance : "+ Bank.Balance());  
        }
```

```
        void Bank.Balance() {
```

```
            return System.out.println(this.balance);  
        }
```

```
}
```

~~static class~~ <sup>Sav</sup> ~~acct~~ extends Account {

double IR = 0.04;

~~double MIN\_BALANCE = 50;~~

~~Sav acct~~ (String cn, String an, "Savings account", double b) {  
     ~~super~~(cn, an, "Savings account", b);  
 }

void compute AND Deposit Interest() {  
     double interest = IR \* balance;  
     balance += interest;  
     System.out.print("Interest added: " + interest);  
 }

void withdraw (~~int~~ double m) {  
     if (m <= balance) {  
         balance -= m;  
         System.out.print("New balance is: " + BankBalance());  
     }  
     else

System.out.print("Insufficient amount");

}

~~void penalty (double)~~

```
static class Extends cur_acct extends Account {
```

```
    double MIN_Balance = 500;
```

```
    double deduction = 50
```

```
    cur_acct (String cn, String an, "current account", double b) {  
        super(cn, an, "current account", b);  
    }
```

```
    void compute And Deposit Withdraw (double m) {
```

```
        if (m <= balance) {
```

```
            balance -= m;
```

```
            System.out.println("New balance is: " + BankBalance());
```

```
        }  
        else
```

```
            System.out.print("Insufficient balance");
```

```
    }  
  
    void Penalty () {
```

```
        if (balance < MIN_BALANCE)
```

```
            balance -= 50;
```

```
            System.out.print("New balance is: " + BankBalance());
```

```
        }
```

```
    }
```



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

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

```
    String acc = "Bank";
```

```
    System.out.println ("Enter no. from 1-2 for following: \n 1) Savings \n 2) Current");
```

```
    int n = SC.nextInt();
```

```
    if (n == 1)
```

```
        acc = "Savings";
```

```
    else
```

```
        acc = "Current";
```

```
    System.out.println ("Enter name, account no.");
```

```
    String name = SC.nextLine();
```

```
    String accno = SC.nextLine();
```

```
    if (n == 1)
```

```
        Account Sav-acc acc = new Sav_acc (" " + name, accno, acc, 0);
```

```
    else
```

```
        Account Cur-acc acc = new Cur_acc (name, accno, acc, 0);
```

```
    System.out.print ("Your account is: " + acc + " account);
```

```
    curAcc.deposit(400);
```

```
    curAcc.withdraw(100);
```

```
    curAcc.deposit(700);
```

```
    curAcc.withdraw(200);
```

```
    curAcc.displayBalance();
```

```
}
```

Q1: Enter no. between 1-2 for following

1) Savings

2) Current

1

Enter name & account number:

Bob

CA98765

your account is Current account

balance is 400

balance is 300

balance is 1000

balance is 800

Current balance - 800;