

Modifications:

1. the Account class as abstract class
2. derive class current account with field: number of transactions and override method deposit and withdraw that restricts, define getTotalTransactions

implement interface MonthlyProcess

3. Derive class Savings Account implement interface MonthlyProcess with field status (string) that indicates the status of the account as ACTIVE or INACTIVE.

override methods: withdraw such that the maximum amount that can be deducted at a time is 5000 and if the balance is below 500 make it the status as INACTIVE

and deposit makes the status ACTIVE if the deposit amount increments the balance to amount greater than 500 and if earlier status was INACTIVE.

```
4. public interface MonthlyProcees{
    public static double interestRate = 0.20;
    public static int fine = 20;

    public abstract double calculateIR();
    public abstract double monthlyCharges();
}
```

CalculateIR - finds the monthly interest and add it to the balance

monthlyCharges - finds the fine and deducts it from the balance.

The class that implements this interface has to keep track of number of withdrawals and if the number of withdrawal per month exceeds 3 times for each withdraw fine is levied.

5. Create class abstract Employee with fields: name(String), designation(String), empid(int), salary(double)

methods: constructor, toString(), abstract calculateSalary

derived class: PermanentEmployee with fields: basicPay(double), gradePAY(double), bonus(double)

methods: constructor, toString(), overridden calculateSalary,

calculateBouns() - if basicPay greater than 10,000, bouns 5% of salary

if basicPay less than 10,000, bouns 10% of salary

if basicPay less than 5,000, bouns 15% of salary

derived class ContractEmployee with fields: number of hours worked(int), wage per hour(double)

methods: constructor, toString(), overridden calculateSalary

both derived class Implement interface Comparable and sort the array of employees based on salary only it consist of objects of Permanent Employee