

Class Account

```
package Program01;

import java.util.Date;

public abstract class Account {
    protected double balance;
    protected Date dateCreated;

    Account(){
        this(0);
    }
    Account(double balance){
        this.balance=balance;
        dateCreated = new Date();
    }
    public double deposit(double deposit){
        this.balance += deposit;
        return deposit;
    }
    public abstract double withdraw(double withdraw);
    public double getBalance() {
        return balance;
    }
    public String getDateCreated() {
        return "This accont was created at "+dateCreated.toString();
    }
    @Override
    public String toString() {
        return "Account [balance=" + balance + ", dateCreated=" + dateCreated
+ " ]";
    }
}
```

Class Checking

```
package Program01;

public class CheckingAccount extends Account {

    private double overdraft;

    public CheckingAccount(double overdraft) {
        this.overdraft = overdraft;
    }

    public CheckingAccount(double balance, double overdraft) {
        super(balance);
        this.overdraft = overdraft;
    }

    public double getOverdraft(){
        return overdraft;
    }

    @Override
    public double withdraw(double withdraw) {
        if(withdraw <= balance+overdraft){
            this.balance -= withdraw;
        }
        else{
            System.out.println("Error, The amount is more than overdraft.");
        }
        return withdraw;
    }

    @Override
    public String toString() {
        return "CheckingAccount [balance=" + balance + ", dateCreated=" +
dateCreated + ", overdraft=" + overdraft + "]";
    }

}
```

Class Saving

```
package Program01;

public class SavingAccount extends Account {

    private double percentInterest;

    public SavingAccount(double percentInterest) {
        this.percentInterest = percentInterest;
    }

    public SavingAccount(double balance, double percentInterest) {
        super(balance);
        this.percentInterest = percentInterest;
    }

    public double getPercentInterest() {
        return percentInterest;
    }

    public double getMonthlyInterest(){
        return balance*((percentInterest/12)/100);
    }

    @Override
    public double withdraw(double withdraw) {
        if(withdraw <= balance){
            this.balance -= withdraw;
        }
        else{
            System.out.println("Error, The amount is more than balance.");
        }
        return withdraw;
    }

    @Override
    public String toString() {
        return "CheckingAccount [balance=" + balance + ", dateCreated=" +
dateCreated + ", percentInterest=" + percentInterest + "];"
    }
}
```

Class Main

```
package Program01;

public class Main {
    public static void main(String[] args) {
        SavingAccount sac1 = new SavingAccount(5000, 1.5);
        CheckingAccount cac1 = new CheckingAccount(5000, 5000);
        //Saving
        System.out.println("-Saving Account-");
        System.out.println("Balance : "+sac1.getBalance());
        System.out.println("Deposit : "+sac1.deposit(1000));
        System.out.println("Balance : "+sac1.getBalance());
        System.out.println("Withdraw : "+sac1.withdraw(5000));
        System.out.println("Balance : "+sac1.getBalance());
        System.out.println("-----");
        //Checking
        System.out.println("-Checking Account-");
        System.out.println("Balance : "+cac1.getBalance());
        System.out.println("Overdraft : "+cac1.getOverdraft());
        System.out.println("Withdraw : "+cac1.withdraw(10000));
        System.out.println("Balance : "+cac1.getBalance());
    }
}
```