Main

```
package Program01;

import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        Account ac1 = new Account(1122,20000);
        ac1.setAnnualInterestRate(4.5);
        System.out.print("Choose your service [1]deposit [2]withdraw : ");
        int service = input.nextInt();
        if(service >= 1 && service <= 2){
            if(service == 1){
                System.out.print("Enter amount to deposit : ");
                double amount = input.nextDouble();
                if(amount > 0){
                    ac1.deposit(amount);
                    ac1.display();
                }
                else {
                    System.err.println("Error,The amount can't be zero or
nagative.");
                }
            }
            if(service == 2){
                System.out.print("Enter amount to withdraw : ");
                double amount = input.nextDouble();
                if(amount > 0 && amount <= ac1.getBalance()){
                    ac1.withdraw(amount);
                    ac1.display();
                }
                else if (amount <= 0){
                    System.err.println("Error,The amount can't be zero or
nagative.");
                }
                else if (amount > ac1.getBalance()){
                    System.err.println("Error,The amount is over than your
balance.");
                }
            }
        }
        else {
            System.out.println("Error ,Enter only [1] or [2].");
        }

        input.close();
```

```
    }
}
```

Account

```
package Program01;

import java.util.Date;

public class Account {
    private int id;
    private double balance;
    private double annualInterestRate;
    private Date dateCreated;

    public Account(){
        dateCreated = new Date();
    }
    public Account(int id ,double balance){
        dateCreated = new Date();
        this.id = id;
        this.balance = balance;
    }
    public int getId(){
        return this.id;
    }
    public double getBalance(){
        return this.balance;
    }
    public double getAnnualInterestRate(){
        return this.annualInterestRate;
    }
    public Date getDateCreated(){
        return this.dateCreated;
    }
    public int setId(int id){
        this.id = id;
        return this.id;
    }
    public double setBalance(double balance){
        this.balance = balance;
        return this.balance;
    }
    public double setAnnualInterestRate(double annualTnterestRate){
        this.annualInterestRate = annualTnterestRate;
        return this.annualInterestRate;
    }
```

```
    public double getMonthlyInterestRate(){
        double monthlyInterestRate = this.annualInterestRate / 12;
        return monthlyInterestRate/100;
    }
    public double getMonthlyInterest(){
        double monthlyInterest = (getMonthlyInterestRate()*this.balance);
        return monthlyInterest;
    }
    public void withdraw(double amount){
        this.balance -=amount;
    }
    public void deposit(double amount){
        this.balance += amount;
    }
    public void display(){
        System.out.println("Balance : " + getBalance() + "$");
        System.out.println("Monthly interest : " + getMonthlyInterest() +
"$");
        System.out.println("Account created date : " + getDateCreated());
    }

}
```