

```
* @author zwelihle
```

```
*/
```

```
public class Account {
```

```
    Account account = new Account(1122, 20000);
```

```
    account.setAnnualInterestRate(4.5);
```

```
    account.withdraw(2500.0);
```

```
    account.deposit(3000.0);
```

```
    System.out.println("Balance: $" + account.getBalance());
```

```
    System.out.println("Monthly Interest: " + account.getMonthlyInterest());
```

```
    System.out.println("Date Created: " + account.getDateCreated());
```

```
}
```

```
}
```

```
class Account {
```

```
    private int id = 0;
```

```
    private double balance = 0.0;
```

```
    private static double annualInterestRate = 0.0;
```

```
    private java.util.Date dateCreated;
```

```
    public Account() {
```

```
        dateCreated = new java.util.Date();
```

```
}
```

```
    public Account(int id, double balace) {
```

```
        this();
```

```
        this.id = id;
```

```
        this.balance = balance;
```

```
}
```

```
public int getId() {
```

```
    return this.id;
```

```
}
```

```
public double getBalance() {
```

```
    return this.balance;
```

```
}
```

```
public double getAnnualInterestRate() {
```

```
    return annualInterestRate;
```

```
}
```

```
public String getDateCreated() {
```

```
    return this.dateCreated.toString();
```

```
}
```

```
public void setId(int id) {
```

```
    this.id = id;
```

```
}
```

```
public void setBalance(double balance) {
```

```
    this.balance = balance;
```

```
}
```

```
public void setAnnualInterestRate(double annualInterestRate) {
```

```
    this.annualInterestRate = annualInterestRate;
```

```

    }

    public double getMonthlyInterestRate() {
        return (annualInterestRate / 100) / 12 ;
    }

    public double getMonthlyInterest() {
        return balance * getMonthlyInterestRate();
    }

    public void withdraw(double amount) {
        this.balance -= amount;
    }

    public void deposit(double amount) {
        this.balance += amount;
    }
}

```

```
private String accountNumber;
```

```
private String fullName;
```

```
private String openDate;
```

```
private double balance;
```

```
public Account(String accNumber, String fullname, String Date,double accBalance)
```

```
{  
  
    this.accountNumber = accNumber;  
    this.fullName = fullname;  
    this.openDate = Date;  
    this.balance = accBalance;  
}
```

```
public void withdraw(double amount)  
{  
    this.balance = this.balance - amount;  
}
```

```
public void deposit(double amount)  
{  
    this.balance = this.balance + amount;  
}
```

```
public void transfer(Account a,double amount)  
{  
    this.withdraw (amount);  
    a.deposit(amount);  
}
```

```
//get methods
```

```
public String getAccountNumber()
```

```
{ return this.accountNumber;
```

```
}
```

```
public String getOpenDate()
```

```
{ return this.openDate;
```

```
}
```

```
public String getFullName()
```

```
{ return this.fullName;
```

```
}
```

```
public double getBalance()
```

```
{
```

```
    return this.balance;
```

```
}
```

```
@Override
```

```
public String toString()
```

```
{
```

```
    return this.accountNumber;  
}
```

```
}
```