

Bank Account Class

Attributes What is a Bank Account?

- a) private String acctNumb
- b) private double balance //attributes (class variables)
3 parts to a variable accessor, type, identifier

Methods –What does a bank account do?

Constructor. How do we build (instantiate) a BankAccount

Default Constructor Same name as the class

```
public BankAccount()  
{  
    balance = 100  
    accountNumber="99999";  
}
```

Constructor with parameters Overloaded Constructor

```
public BankAccount(double myBalance, String myAccount)  
{  
    balance = myBalance;  
    acctNumber = myAccount  
}
```

Accessor methods gives us info about the bank account (getter)

public double getBalance()

```
{  
    return balance;  
}
```

public String getAccount()

```
{  
    return acctNumber;  
}
```

```
public String toString()//returns a string representation of the object
{

    return ("This Bank Account has a balance of " + getBalance()+
           ", and account number " + getAccount() + ".");
}
```

Mutator (modifier) methods-changes the state of the object (setter) type void

```
public void deposit ( double amount)
```

```
{
    balance = balance + amount;
    // balance +=amount;
}
```

```
public void withdraw (double amount)
```

```
{
    balance = balance - amount;
    // balance -=amount;
}
```

```
public void calculateMonthlyInterest(int rate, myBalance)
```

```
{
    double interest;

    interest = myBalance *rate/100

    ;
    // balance +=amount;
}
```

Main Method (Driver, Runner, Tester) How can we use the class BankAccount?

```
public static void main(String[] args)
{
    BankAccount one = new BankAccount();
    one.deposit(200);
    System.out.println(one);
        BankAccount two = new BankAccount(1000, "11111111");
    two.calcMonthlyInterest(3, balance); //What is wrong with this parameter set?
        System.out.println(two.getBalance());
}
```