

Create Bank

```
Bank myBank = newBank()
```

myBank

Memory Address: 1000

Memory Address: 1001

```
ArrayList <BankAccount> accounts = new ArrayList<BankAccount>(); Address: 1010  
ArrayList<Customer> customers = new ArrayList<Customer>(); Address: 1011
```

Create Customer

```
Customer c1 = new Customer("Alison Brown", 123);
```

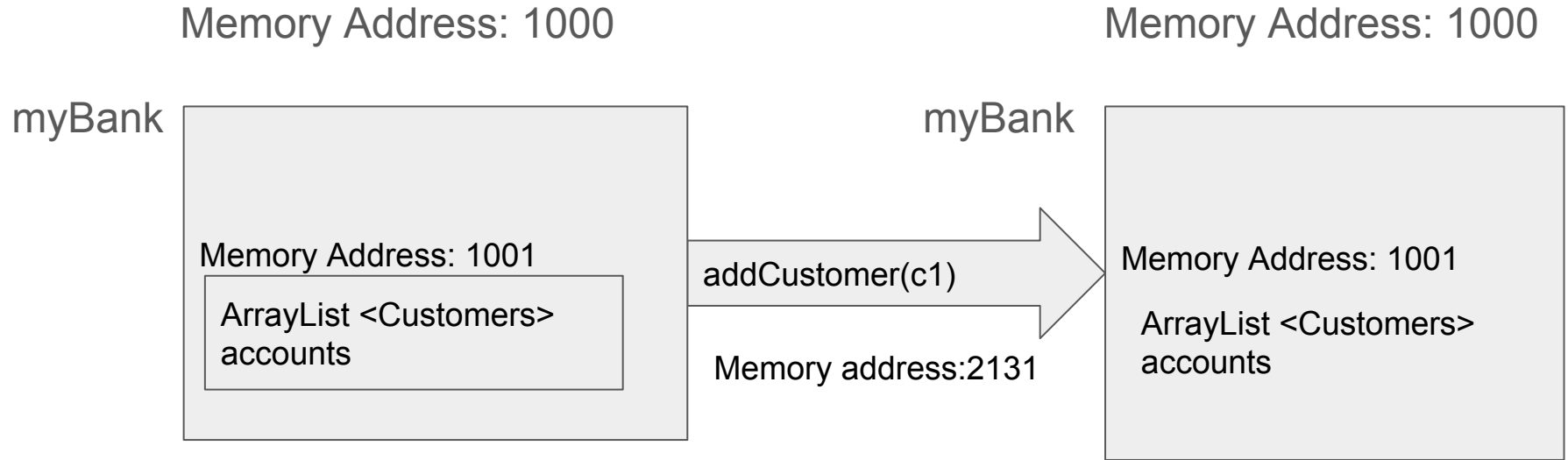
Memory Address: 2131

c1

Customer
Name = "Alison Brown"
ID = 123

Add Customer to Customer List

```
myBank.addCustomer(c1);
```



Create Account

```
BankAccount b1 = new BankAccount(c1, 100.00);
```

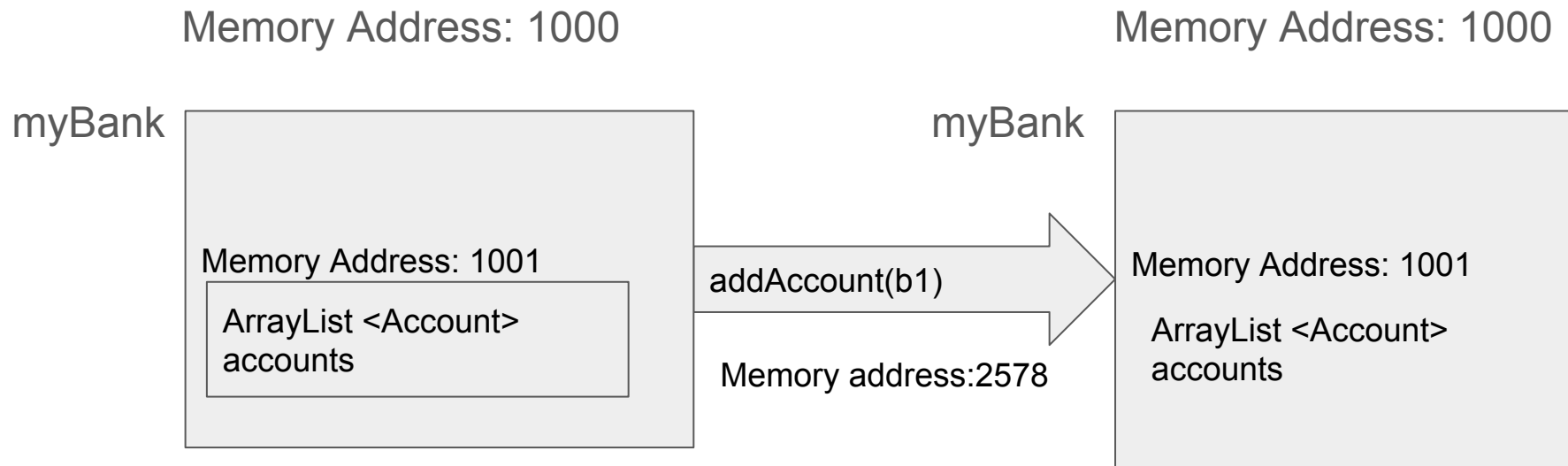
Memory Address: 2578

b1

```
BankAccount  
Balance = 100.0  
accountNumber = null  
Customer = c1
```

Add Account to Account List

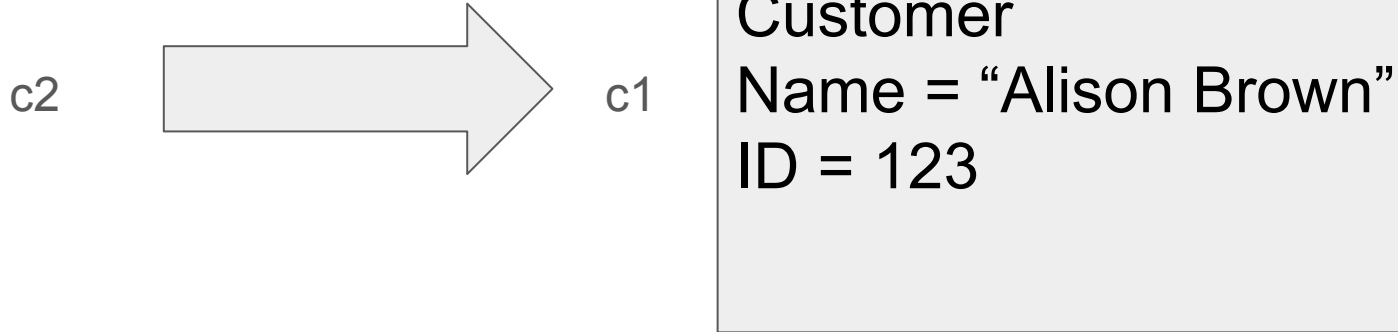
```
myBank.addAccount(b1);
```



Create Customer

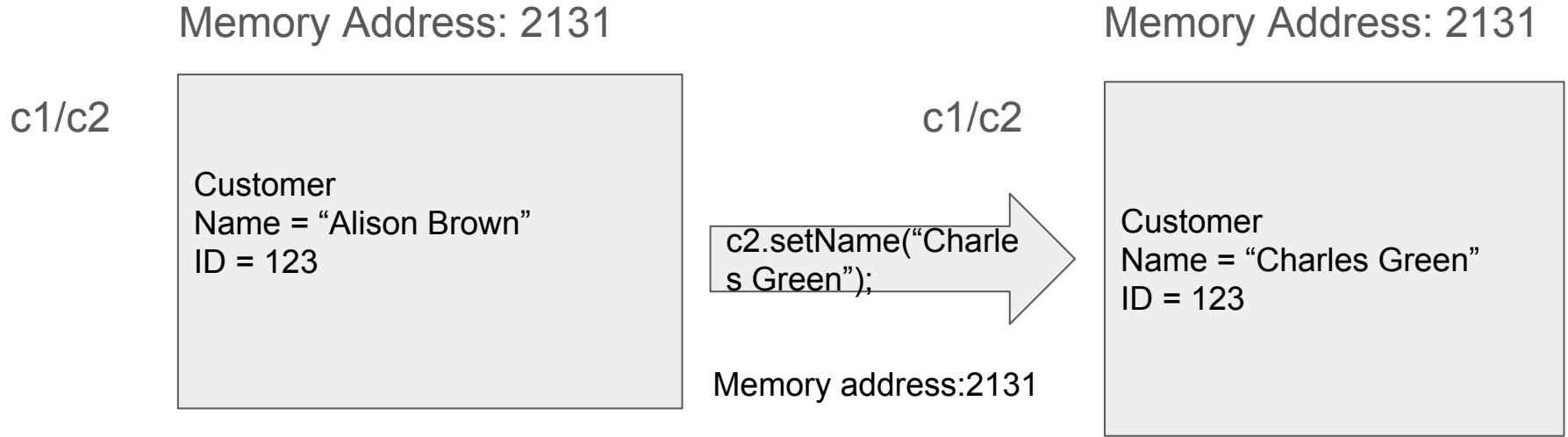
```
Customer c2 = b1.getAccountHolder();
```

Memory Address: 2131



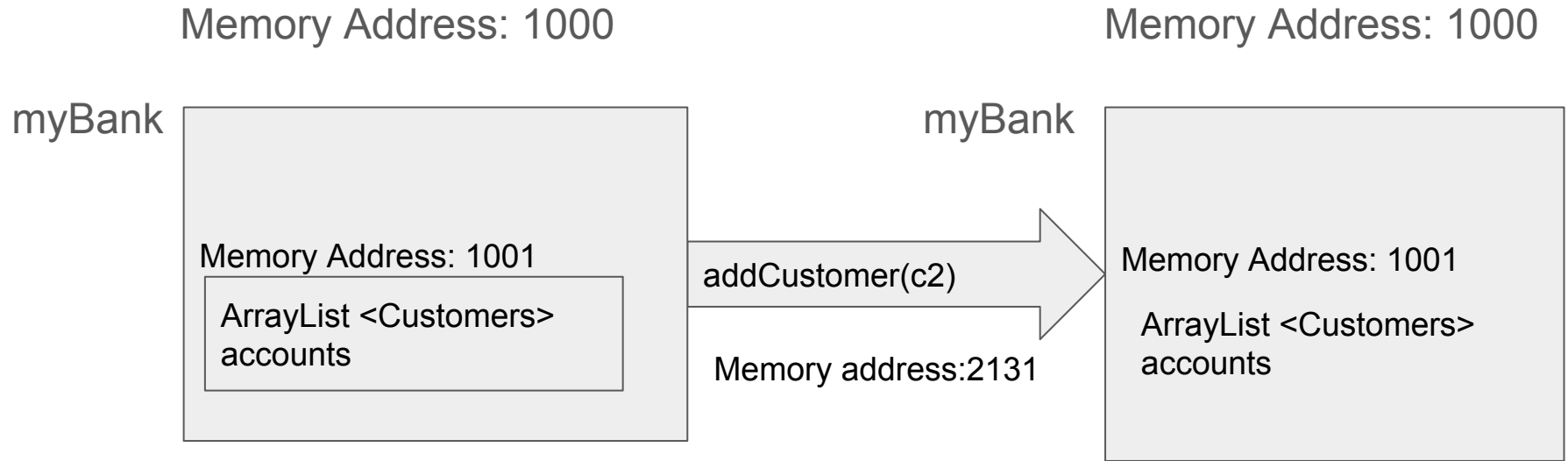
Set Name

```
c2.setName("Charles Green");
```



Add Customer to Customer List

```
myBank.addCustomer(c2);
```



Print Statement - Accounts

```
System.out.println(myBank.toString());
```

Memory Address: 1000

myBank

b1.getName() → Charles Green
b1.getID() → 123
accountNumber → null
Balance → 100.0

print

(Charles Green 123) null 100.0
\n

Print Statement - Customers

```
System.out.println(myBank.toString());
```

Memory Address: 1000

myBank

c1.getName() → Charles Green
c1.getID() → 123
c2.getName() → Charles Green
c2.getID() → 123

print

Charles Green 123

Charles Green 123
\n

Create Customer

```
Customer c3 = new Customer("Alan Turing", 1945);
```

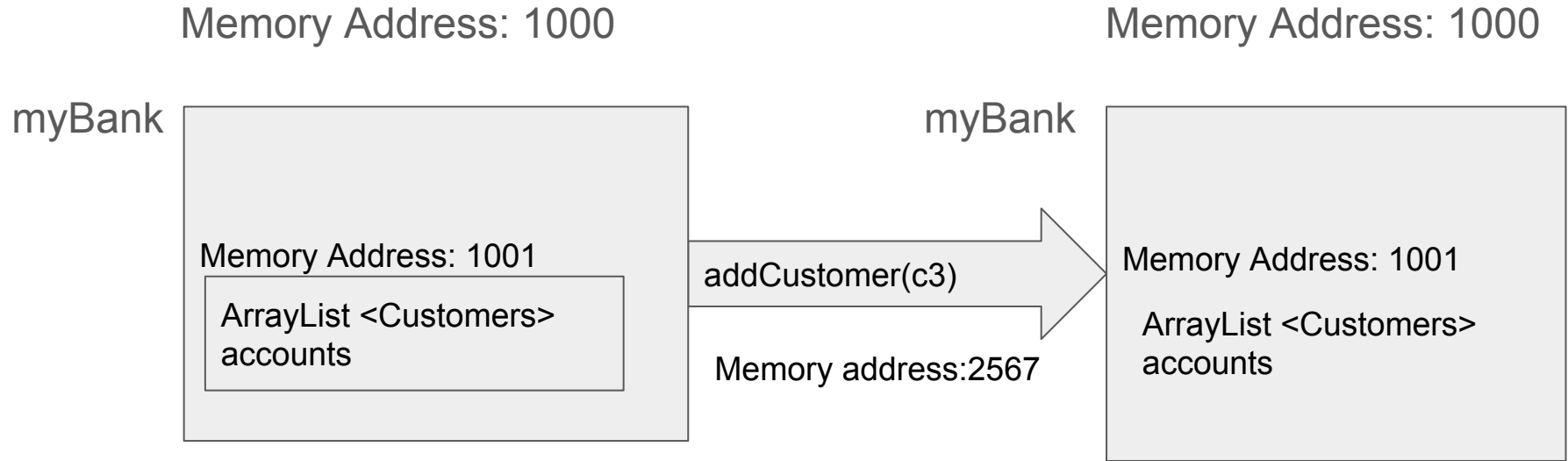
Memory Address: 2567

c3

Customer
Name = "Alan Turing"
ID = 1945

Add Customer to Customer List

```
myBank.addCustomer(c3);
```



Create Account

```
BankAccount b2 = new BankAccount(c3, 50.00);
```

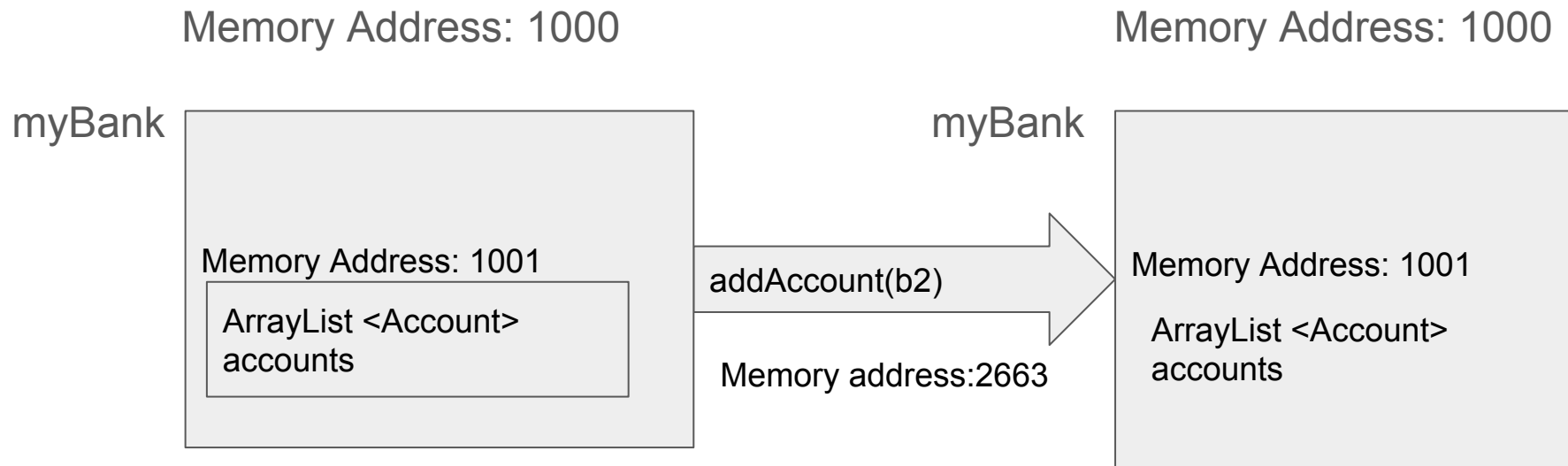
Memory Address: 2663

b2

```
BankAccount  
Balance = 50.0  
accountNumber = null  
Customer = c3
```

Add Account to Account List

```
myBank.addAccount(b2);
```



Print Statement - Accounts

```
System.out.println(myBank.toString());
```

Memory Address: 1000

myBank

b1.getName() → Charles Green
b1.getID() → 123
b1.accountNumber → null
b1.balance → 100.0
b2.getName() → Alan Turing
b2.getID() → 1945
b2.accountNumber → null
b2.balance → 50.0

print

(Chales Green 123) null 100.0
(Alan Turing 1945) null 50.0
\n

Print Statement - Customers

```
System.out.println(myBank.toString());
```

Memory Address: 1000

myBank

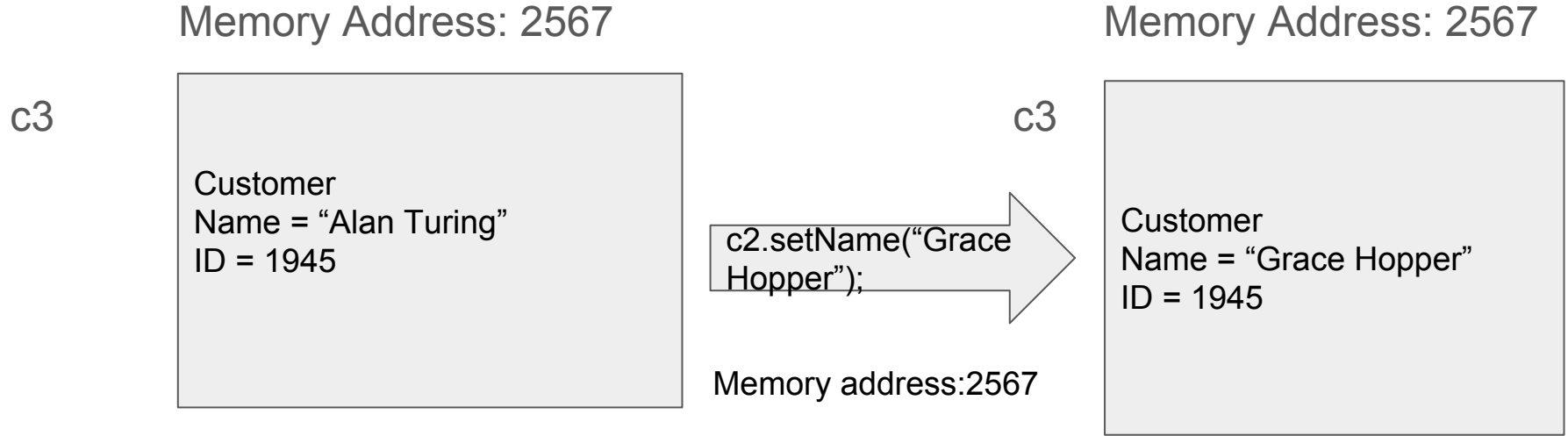
```
c1.getName() → Charles Green  
c1.getID() → 123  
c2.getName() → Charles Green  
c2.getID() → 123  
c3.getName() → Alan Turing  
c3.getID() → 1945
```

print

```
Charles Green 123  
Charles Green 123  
Alan Turing 1945  
\n
```


Set Name

```
c3.setName("Grace Hopper");
```



Print Statement - Accounts

```
System.out.println(myBank.toString());
```

Memory Address: 1000

myBank

```
b1.getName() → Charles Green  
b1.getID() → 123  
b1.accountNumber → null  
b1.balance → 100.0  
b2.getName() → Grace Hopper  
b2.getID() → 1945  
b2.accountNumber → null  
b2.balance → 50.0
```

print

```
(Charles Green 123) null 100.0  
(Grace Hopper 1945) null 50.0  
\n
```

Print Statement - Customers

```
System.out.println(myBank.toString());
```

Memory Address: 1000

myBank

```
c1.getName() → Charles Green  
c1.getID() → 123  
c2.getName() → Charles Green  
c2.getID() → 123  
c3.getName() → Grace Hopper  
c3.getID() → 1945
```

print

```
Charles Green 123  
Charles Green 123  
Grace Hopper 1945  
\n
```