## **Object Reference**

```
CashRegister reg1 = new CashRegister();
 CashRegister reg2 = reg1;
 reg2.addItem(2.95);
This animation demonstrates the copying of object references.
Object References
```

```
reg1
CashRegister reg1 = new CashRegister();
 CashRegister reg2 = reg1;
 reg2.addItem(2.95);
We declare a variable of type CashRegister.
```





```
reg1
CashRegister reg1 = new CashRegister();
                                                                        CashRegister
 CashRegister reg2 = reg1;
 reg2.addItem(2.95);
                                                                     itemCount =
                                                                    totalPrice =
                                                                                    0.0
```





An object of type CashRegister is constructed.

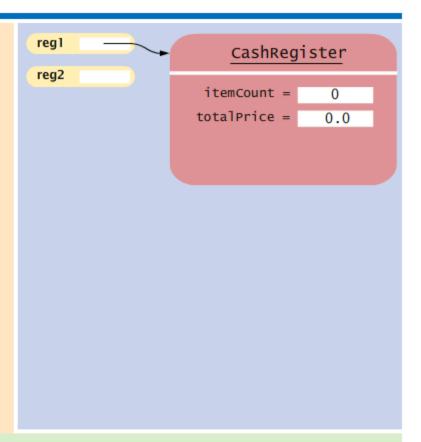
```
reg1
CashRegister reg1 = new CashRegister();
                                                                        CashRegister
 CashRegister reg2 = reg1;
 reg2.addItem(2.95);
                                                                    itemCount =
                                                                                    0
                                                                   totalPrice =
                                                                                    0.0
```

The CashRegister variable is initialized with a reference to the CashRegister object.





```
CashRegister reg1 = new CashRegister();
CashRegister reg2 = reg1;
reg2.addItem(2.95);
```



We declare a second variable of type CashRegister.





```
CashRegister reg1 = new CashRegister();
                                               reg1
                                                                        CashRegister
CashRegister reg2 = reg1;
                                               reg2
 reg2.addItem(2.95);
                                                                    itemCount =
                                                                   totalPrice =
                                                                                    0.0
```

Now both variables refer to the same object.





```
CashRegister reg1 = new CashRegister();
                                               reg1
                                                                         CashRegister
 CashRegister reg2 = reg1;
                                               reg2
reg2.addItem(2.95);
                                                                     itemCount =
                                                                    totalPrice =
                                                                                    2.95
```

We call the addItem method from the first reference. The object state changes.





```
CashRegister reg1 = new CashRegister();
                                              reg1
                                                                        CashRegister
CashRegister reg2 = reg1;
                                              reg2
reg2.addItem(2.95);
                                                                    itemCount =
                                                                   totalPrice =
                                                                                    2.95
```

The changed object state is visible from both variables.



