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- 1. Results of test: When num2 = num1, num2 is pointing to the same reference of num1. Therefore, when printing out the identityHashCode, we get the same answer. Since integer is immutable, when num1 is assigned to a new integer, it references to a new modified copy with the value is 7, appends num1 to its reference. As a result, the identityHashCode changes and the value of the num1 changes, but the num2 still references the original memory, making no changes in its result.
- 2. Results of Mypoint class: .Mypoint class is immutable, but the instance variables (x and y) are int which is mutable. Therefore, the reference will not change, but the values inside the class will change.

## <Screenshot of the output of test.java>



<Screenshot of the modified Mypoint.java>

```
1 public class Mypoint {
      private final Integer x;
  3
      private final Integer y;
  4
  5 public Mypoint(Integer x, Integer y) {
      this.x = x;
  7
      this.y = y;
  8
  9
 10⊝ public static void main(String []arguments){
      Mypoint pt1, pt2;
 11
                           void Mypoint.main(String[]
      pt1 = new Mypoint(1
 12
                             arguments)
 13
      pt2 = pt1;
 14
 15
      System.out.println(
                                                    Press 'F2' for focus
      System. out.println(System. identityHashCode(pt2));
 16
 17
 18
     pt1 = new Mypoint(200, 200);
 19
     //pt1.x = 200;
 20
    //pt1.y = 200;
 21
 22
     System.out.println(System.identityHashCode(pt1));
 23
      System.out.println(System.identityHashCode(pt2));
      System.out.println("Point1: " + pt1.x + ", " + pt1.y);
 24
      System.out.println("Point2: " + pt2.x + ", " + pt2.y);
 25
 26
 27
      }
 28 }
Problems @ Javadoc 🔁 Declaration 📮 Console 💢
<terminated> Mypoint [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_
865113938
865113938
1442407170
865113938
Point1: 200, 200
```

Point2: 100, 100