

# Certification SCJP/OCJP Mock Collections

Author: JavaChamp Team

Senior Java Developer @QuizOver.com

Copyright (c) 2014-2015

# Create, Share, and Discover Online Quizzes.

QuizOver.com is an intuitive and powerful online quiz creator. [learn more](#)

Join QuizOver.com



## How to Analyze Stocks

By Yasser Ibrahim

1 month ago  
12 Responses

© iStock: Thomson Moter



## Pre Employment English

By Katharina jennifer N

5 months ago  
19 Responses

© iStock: Albin



## Lean Startup Quiz

By Yasser Ibrahim

2 months ago  
16 Responses

© iStock: Gekwini Okun

Powered by QuizOver.com

The Leading Online Quiz & Exam Creator

Create, Share and Discover Quizzes & Exams

<http://www.quizover.com>

## Disclaimer

All services and content of QuizOver.com are provided under QuizOver.com terms of use on an "as is" basis, without warranty of any kind, either expressed or implied, including, without limitation, warranties that the provided services and content are free of defects, merchantable, fit for a particular purpose or non-infringing.

The entire risk as to the quality and performance of the provided services and content is with you.

In no event shall QuizOver.com be liable for any damages whatsoever arising out of or in connection with the use or performance of the services.

Should any provided services and content prove defective in any respect, you (not the initial developer, author or any other contributor) assume the cost of any necessary servicing, repair or correction.

This disclaimer of warranty constitutes an essential part of these "terms of use".

No use of any services and content of QuizOver.com is authorized hereunder except under this disclaimer.

The detailed and up to date "terms of use" of QuizOver.com can be found under:

<http://www.QuizOver.com/public/termsOfUse.xhtml>

# eBook Content License

Creative Commons License

Attribution-NonCommercial-NoDerivs 3.0 Unported (CC BY-NC-ND 3.0)

<http://creativecommons.org/licenses/by-nc-nd/3.0/>

You are free to:

Share: copy and redistribute the material in any medium or format

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

**Attribution:** You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

**NonCommercial:** You may not use the material for commercial purposes.

**NoDerivatives:** If you remix, transform, or build upon the material, you may not distribute the modified material.

**No additional restrictions:** You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

# Table of Contents

Quiz Permalink: <http://www.quizover.com/question/java-collections-certification-questions>

Author Profile: <http://www.quizover.com/user/profile/Java.Champ>

## 1. Collections

## 4. Chapter: Collections

### 1. Collections Questions

#### 4.1.1. What is the output of compiling and running the following program?

Author: JavaChamp Team

What is the output of compiling and running the following program?

```
import java.util.NavigableMap;
import java.util.TreeMap;

public class Tester {

    public static void main(String[] args) {

        TreeMap tree = new TreeMap();
        tree.put("aa", 1);
        tree.put("cc", 2);
        tree.put("ee", 3);
        tree.put("gg", 4);

        NavigableMap nvMap = tree.headMap("ee", false);
        nvMap.put("nn", 5); // line 16
        System.out.println(nvMap);

    }
}
```

Please choose only one answer:

- {aa=1, cc=2, ee=3}
- {aa=1, cc=2, ee=3, nn=5}
- Compilation error at line 16
- Exception is thrown at line 16

Check the answer of this question online at QuizOver.com:

Question: [How to use java headMap?](#)

Flashcards:

<http://www.quizover.com/flashcards/how-to-use-java-headmap?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/how-to-use-java-headmap?pdf=3044>

#### 4.1.2. What is the output of compiling and running the following program?

Author: JavaChamp Team

What is the output of compiling and running the following program?

```
import java.util.NavigableMap;
import java.util.TreeMap;

public class Tester{

    public static void main(String[] args) {
        TreeMap tree = new TreeMap();
        tree.put("aa", 1);
        tree.put("cc", 2);
        tree.put("ee", 3);
        tree.put("gg", 4);

        NavigableMap nvMap = tree.headMap("ee", false);
        System.out.print(nvMap);

    }
}
```

Please choose only one answer:

- {aa=1, cc=2}
- {aa=1, cc=2, ee=3}
- {aa=1, cc=2, ee=3, gg=4}
- No output is produced
- Compilation error

Check the answer of this question online at QuizOver.com:

Question: [What does java headMap\(\) do?](#)

Flashcards:

<http://www.quizover.com/flashcards/what-does-java-headmap-do?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/what-does-java-headmap-do?pdf=3044>



### 4.1.3. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.Arrays;
import java.util.Set;
import java.util.TreeSet;

public class Tester extends Thread {

    public static void main(String[] args) {
        Integer[] arr = {7,5,7,3};
        Set<Integer> set = new TreeSet<Integer>(Arrays.asList(arr));
        set.add(4);
        for(Integer value: set){
            System.out.print(value);
        }
    }
}
```

Please choose only one answer:

- Compilation error
- 75734
- 3457
- 34577

Check the answer of this question online at QuizOver.com:

Question: [how to sort java TreeSet?](#)

Flashcards:

<http://www.quizover.com/flashcards/how-to-sort-java-treeset?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/how-to-sort-java-treeset?pdf=3044>

#### 4.1.4. What is the expected output after compiling and running the followi...

Author: Yasser Ibrahim

What is the expected output after compiling and running the following code?

```
import java.util.HashSet;
import java.util.Set;

public class Test{
    public static void main(String[] args) {

        Set<Foo> myFooSet = new HashSet<Foo>();
        myFooSet.add(new Foo(2));
        myFooSet.add(new Foo(1));
        myFooSet.add(new Foo(3));
        myFooSet.add(new Foo(3));
        myFooSet.add(new Foo(2));

        System.out.print(myFooSet.size());
    }
}

class Foo {
    Integer code;

    Foo(Integer c) {
        code = c;
    }

    public boolean equals(Foo f) {
        return false;
    }

    public boolean equals(Object f) {
        return true;
    }

    public int hashCode() {
        return 17;
    }
}
```

Please choose only one answer:

- 1
- 3
- 5
- compilation error

Check the answer of this question online at QuizOver.com:

Question: [how to override equals\(\) in java?](#)

Flashcards:

Flashcards:

<http://www.quizover.com/flashcards/how-to-override-equals-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/how-to-override-equals-in-java?pdf=3044>

#### 4.1.5. What is the output of compiling and running the following code?

Author: Yasser Ibrahim

What is the output of compiling and running the following code?

```
public class Test{
public static void main(String[] args) {

    Foo foo1 = new Foo(1);
    Foo foo2 = new Foo(2);

    System.out.print(foo1.equals(foo2));

}
}

class Foo {
    Integer code;

    Foo(Integer c) {
        code = c;
    }

    public boolean equals(Foo f) {
        return false;
    }

    public boolean equals(Object f) {
        return true;
    }

}
```

Please choose only one answer:

- true
- false

Check the answer of this question online at QuizOver.com:

Question: [overriding equals\(\) method in java](#)

Flashcards:

<http://www.quizover.com/flashcards/overriding-equals-method-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/overriding-equals-method-in-java?pdf=3044>

#### 4.1.6. The following code will throw a runtime exception, which line cause...

Author: Yasser Ibrahim

The following code will throw a runtime exception, which line causes the exception?

```
import java.util.HashSet;
import java.util.Set;
import java.util.TreeSet;

public class Test{
    public static void main(String[] args) {

        Set s = new HashSet();
        s.add("A"); // Line 1
        s.add(new Foo()); // Line 2

        Set t = new TreeSet();
        t.add("A"); // Line 3
        t.add(new Foo()); // Line 4
    }
}

class Foo {}
```

Please choose only one answer:

- Line 1
- Line 2
- Line 3
- Line 4

Check the answer of this question online at QuizOver.com:

Question: [inserting into a TreeSet in java](#)

Flashcards:

<http://www.quizover.com/flashcards/inserting-into-a-treeset-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/inserting-into-a-treeset-in-java?pdf=3044>

#### 4.1.7. What is the result of compiling and running the following code?

Author: Yasser Ibrahim

What is the result of compiling and running the following code?

```
import java.util.Arrays;

public class Tester{
public static void main(String[] args) {

    String[] arr = { "java", "champ", "champion" };
    Arrays.sort(arr);
    System.out.print(Arrays.binarySearch(arr, "champion"));
    System.out.print(Arrays.binarySearch(arr, "You"));

}
}
```

Please choose only one answer:

- 10
- 1-1
- un expected result
- 20
- 2-1
- compilation error

Check the answer of this question online at QuizOver.com:

Question: [using binarySearch with an array in java](#)

Flashcards:

<http://www.quizover.com/flashcards/using-binarysearch-with-an-array-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/using-binarysearch-with-an-array-in-java?pdf=3044>

#### 4.1.8. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.Arrays;

public class Tester {
    public static void main(String[] args) {

        String[] arr = { "java", "champ", "you" };
        System.out.print(Arrays.binarySearch(arr, "java"));
        System.out.print(Arrays.binarySearch(arr, "You"));

    }
}
```

Please choose only one answer:

- 02
- 0-1
- 13
- the result is unpredictable
- compilation error

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [searching an array using binarySearch in java](#)

Flashcards:

<http://www.quizover.com/flashcards/searching-an-array-using-binarysearch-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/searching-an-array-using-binarysearch-in-java?pdf=3044>

#### 4.1.9. What is the result of compiling and running the following code?

Author: Yasser Ibrahim

What is the result of compiling and running the following code?

```
import java.util.Arrays;

public class Tester {
    public static void main(String[] args) {
        Integer[] arr = { 1, 2, 3 };
        System.out.print(Arrays.binarySearch(arr, 1)); // line 1
        System.out.print(Arrays.binarySearch(arr, "javachamp")); // line 2
    }
}
```

Please choose all the answers that apply:

- line 1 will print 0
- line 1 will print 1
- line 1 causes compilation error
- line 2 will print 0
- line 2 will causes compilation error
- line 2 will causes RuntimeException

Check the answer of this question online at QuizOver.com:

Question: [binarySearch in java](#)

Flashcards:

<http://www.quizover.com/flashcards/binarysearch-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/binarysearch-in-java?pdf=3044>



#### 4.1.10. What is the result of compiling and running the following code?

Author: Yasser Ibrahim

What is the result of compiling and running the following code?

```
import java.util.ArrayList;
import java.util.Collections;
import java.util.List;

public class Test{

    public static void main(String[] args) {

        List<Human> humans = new ArrayList<Human>();
        humans.add(new Human(13));
        humans.add(new Human(33));
        humans.add(new Human(21));
        humans.add(new Human(21));
        Collections.sort(humans);
        System.out.print(humans.get(0).age);
        System.out.print(humans.size());

    }

}

class Human implements Comparable<Human> {
    int age;

    public Human(int age) {
        this.age = age;
    }

    public int compareTo(Human h) {
        return h.age.compareTo(this.age);
    }

}
```

Please choose only one answer:

- 333
- 334
- 133
- 134
- Compilation fails

Check the answer of this question online at QuizOver.com:

Question: [How to implement Comparable in java](#)

Flashcards:

<http://www.quizover.com/flashcards/how-to-implement-comparable-in-java?pdf=3044>

Interactive Question:



#### 4.1.11. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.ArrayList;
import java.util.Collections;
import java.util.Comparator;
import java.util.List;

public class Tester{

    public static void main(String[] args) {

        List<Human> humans = new ArrayList<Human>();
        humans.add(new Human(13));
        humans.add(new Human(33));
        humans.add(new Human(21));
        humans.add(new Human(21)); // line 1
        HumanComparator c = new HumanComparator(); // line 2
        Collections.sort(humans, c); // line 3
        System.out.print(humans.get(0).age);
        Collections.sort(humans); // line 4
        System.out.print(humans.get(0).age);

    }

}

class Human implements Comparable<Human> {
    Integer age;

    public Human(int age) {
        this.age = age;
    }

    public int compareTo(Human h) {
        return h.age.compareTo(this.age);
    }

}

class HumanComparator implements Comparator<Human> {

    public int compare(Human h1, Human h2) {
        return h1.age.compareTo(h2.age);
    }

}
```

Please choose only one answer:

- line 1 causes a compilation error (no duplicates are allowed)
- line 2 causes a compilation error, the correct instantiation for HumanComparator is as so :  
new HumanComparator<Human>()
- line 4 causes a compilation error, must supply a Comparator to methos sort.

- The program compiles and runs fine printing 1333
- The program compiles and runs fine printing 3313

Check the answer of this question online at QuizOver.com:

Question: [how to sort a collection in java?](#)

Flashcards:

<http://www.quizover.com/flashcards/how-to-sort-a-collection-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/how-to-sort-a-collection-in-java?pdf=3044>

#### 4.1.12. What is the result of compiling and running the following code?

Author: Yasser Ibrahim

What is the result of compiling and running the following code?

```
import java.util.HashSet;
import java.util.Set;

public class Test{

    public static void main(String[] args) {

        Set<Human> humans = new HashSet<Human>();
        humans.add(new Human(13));
        humans.add(new Human(33));
        humans.add(new Human(21));
        humans.add(new Human(21));
        System.out.print(humans.size()+" ");
        System.out.print(humans);

    }

}

class Human implements Comparable<Human> {
    Integer age;

    public Human(int age) {
        this.age = age;
    }

    public int compareTo(Human h) {
        return h.age.compareTo(this.age);
    }

    public String toString() {
        return ""+this.age;
    }

}
```

Please choose only one answer:

- 4 [33, 21, 13, 21]
- 3 [21, 33, 13]
- compilation error
- exception is thrown at run time

Check the answer of this question online at QuizOver.com:

Question: [inserting into a HashSet in java](#)

Flashcards:

<http://www.quizover.com/flashcards/inserting-into-a-hashset-in-java?pdf=3044>

Interactive Question:

Interactive Question:

<http://www.quizover.com/question/inserting-into-a-hashset-in-java?pdf=3044>

#### 4.1.13. In this program, the set humans allows for objects of type Human wi...

Author: Yasser Ibrahim

In this program, the set humans allows for objects of type Human with the same age to be inserted. What can be done to make the set reject any Human object with value age equals to age value for an already inserted human object?

```
import java.util.HashSet;
import java.util.Set;

public class Test{

    public static void main(String[] args) {

        Set<Human> humans = new HashSet<Human>();
        humans.add(new Human(13));
        humans.add(new Human(33));
        humans.add(new Human(21));
        humans.add(new Human(21));
    }

}

class Human {
    Integer age;

    public Human(int age) {
        this.age = age;
    }

}
```

Please choose only one answer:

- only override method equals() in Human as follows:  
public boolean equals(Object h) {  
return this.age==((Human)h).age;  
}
- only override method hashCode() in Human as follows:  
public int hashCode(){  
return 17;  
}
- must override both methods hashCode() and equals() as illustrated in the above answers

Check the answer of this question online at QuizOver.com:  
Question: [How the Set collection allows no duplicates in java ?](#)

Flashcards:  
<http://www.quizover.com/flashcards/how-the-set-collection-allows-no-duplicates-in-java?pdf=3044>

Interactive Question:





#### 4.1.14. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.TreeMap;

public class Test {

    public static void main(String[] args) {
        TreeMap<Integer,String> map = new TreeMap<Integer,String>();
        map.put(1, "one");
        map.put(2, "two");
        map.put(3, "three");
        map.put(4, "four");
        System.out.print(map.higherKey(2));
        System.out.print(map.ceilingKey(2));
        System.out.print(map.floorKey(1));
        System.out.print(map.lowerKey(1));
    }
}
```

Please choose only one answer:

- 3211
- 321null
- 321-1
- 231null
- 2310

Check the answer of this question online at QuizOver.com:

Question: [TreeMap methods in java](#)

Flashcards:

<http://www.quizover.com/flashcards/treemap-methods-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/treemap-methods-in-java?pdf=3044>

#### 4.1.15. What does the method ceilingKey in TreeMap do?

Author: Yasser Ibrahim

What does the method ceilingKey in TreeMap do?

Please choose only one answer:

- Returns the least key greater than or equal to the given key, or null if there is no such key.
- Returns the least key strictly greater than the given key, or null if there is no such key.
- Returns the least key in the tree

Check the answer of this question online at QuizOver.com:

Question: [ceilingKey in TreeMap in java](#)

Flashcards:

<http://www.quizover.com/flashcards/ceilingkey-in-treemap-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/ceilingkey-in-treemap-in-java?pdf=3044>

#### 4.1.16. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.SortedMap;
import java.util.TreeMap;

public class Test {

    public static void main(String[] args) {
        TreeMap<Integer,String> map = new TreeMap<Integer,String>();
        map.put(1, "one");
        map.put(2, "two");
        map.put(3, "three");
        map.put(4, "four");
        SortedMap<Integer, String> smap1 = map.tailMap(2);
        SortedMap<Integer, String> smap2 = smap1.headMap(4);
        SortedMap<Integer, String> smap3 = smap2.subMap(2, 3);
        System.out.println(smap3);
    }
}
```

Please choose only one answer:

- {2=two, 3=three, 4=four}
- {2=two, 3=three}
- {2=two}
- no output is printed

Check the answer of this question online at QuizOver.com:

Question: [tailMap, headMap and subMap in java](#)

Flashcards:

<http://www.quizover.com/flashcards/tailmap-headmap-and-submap-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/tailmap-headmap-and-submap-in-java?pdf=3044>

#### 4.1.17. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.SortedSet;
import java.util.TreeSet;

public class Test {

    public static void main(String[] args) {
        TreeSet<Integer> map = new TreeSet<Integer>();
        map.add(1);
        map.add(2);
        map.add(4);
        map.add(7);
        SortedSet<Integer> smap = map.subSet(2,7);
        map.add(5);
        map.add(9);
        System.out.println(smap);
    }
}
```

Please choose only one answer:

- [2, 4, 5, 7]
- [2, 4, 7]
- [2, 4, 5, 7, 9]
- [2, 4, 5]
- [2, 4]

Check the answer of this question online at QuizOver.com:

Question: [subSet in java](#)

Flashcards:

<http://www.quizover.com/flashcards/subset-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/subset-in-java?pdf=3044>

#### 4.1.18. What can be inserted, independently, at line // insert code here to...

Author: Yasser Ibrahim

What can be inserted, independently, at line // insert code here to cause the program to print out : [3, 4, 7, 0]

```
import java.util.*;

public class Test {

    public static void main(String[] args) {
        Queue<Integer> queue = new LinkedList<Integer>();
        queue.add(1);
        queue.add(3);
        queue.add(4);
        queue.add(7);

        // insert code here

        System.out.println(queue);
    }
}
```

Please choose all the answers that apply:

- queue.poll();queue.offer(0);queue.peek();
- queue.peek();queue.add(0);queue.peek();queue.poll();
- queue.add(0);queue.remove();queue.peek();
- queue.add(0);queue.poll();queue.remove();

Check the answer of this question online at QuizOver.com:

Question: [PriorityQueue methods in java](#)

Flashcards:

<http://www.quizover.com/flashcards/priorityqueue-methods-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/priorityqueue-methods-in-java?pdf=3044>

#### 4.1.19. What is the result of compiling and running the following code?

Author: Yasser Ibrahim

What is the result of compiling and running the following code?

```
import java.util.*;

public class Test {

    public static void main(String[] args) {
        TreeSet s = new TreeSet();
        s.add(1);
        s.add(99.9);
        s.add(99.9);
        s.add(96.9);

        for (int i = 0; i < s.size(); i++) {
            System.out.print(s.pollFirst()+" ");
        }
    }
}
```

Please choose only one answer:

- 1 96.9 99.9
- 1 96.9 99.9 99.9
- 1
- compilation error
- an exception is thrown at run time

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [inserting into a non generic TreeSet in java](#)

Flashcards:

<http://www.quizover.com/flashcards/inserting-into-a-non-generic-treeset-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/inserting-into-a-non-generic-treeset-in-java?pdf=3044>

#### 4.1.20. Based on equals() and hashCode() contract in java, which of the fol...

Author: JavaChamp Team

Based on equals() and hashCode() contract in java, which of the following is true?

Please choose all the answers that apply:

- if o1.equals(o2) is true, then hashCode(o1)== hashCode(o2) must return true
- if o1.equals(o2) is true, then hashCode(o1)== hashCode(o2) might return true
- if o1.equals(o2) is false, then hashCode(o1)== hashCode(o2) must return false
- if o1.equals(o2) is false, then hashCode(o1)== hashCode(o2) might return true
- if hashCode(o1)== hashCode(o2) returns true then o1.equals(o2) must return true

Check the answer of this question online at QuizOver.com:

Question: [equals and hashCode contract in java](#)

Flashcards:

<http://www.quizover.com/flashcards/equals-and-hashcode-contract-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/equals-and-hashcode-contract-in-java?pdf=3044>

#### 4.1.21. What is the result of compiling and running the following code?

Author: JavaChamp Team

What is the result of compiling and running the following code?

```
import java.util.*;

public class Test {

    public static void main(String[] args) {

        String[] arr = { "Java", "Champ", "." };
        List<String> list = (List<String>) Arrays.asList(arr); // line 1
        arr[2] = ".com"; // line 2
        for (String word : list) {
            System.out.print(word);
        }
    }
}
```

Please choose only one answer:

- JavaChamp.
- JavaChamp.com
- compilation error at line 1, the correct method is toList not asList
- compilation error at line 2, cannot modify array after converting to a List
- compilation error in other lines than lines 1 and 2

Check the answer of this question online at QuizOver.com:

Question: [asList in java](#)

Flashcards:

<http://www.quizover.com/flashcards/aslist-in-java?pdf=3044>

Interactive Question:

<http://www.quizover.com/question/aslist-in-java?pdf=3044>