Oracle_RealExamQuestions.Com_1Z0-851_v2011-11-09_265q_By-Bomas

Exam A

QUESTION 1
Given:

```
01. public class Person {
02.     private String name;
03.     public Person(String name) { this.name = name; }
04.     public boolean equals(Person p) {
05.         return p.name.equals(this.name);
06.     }
07. }
```

Which statement is true?

A. The equals method does NOT properly override the Object.equals method.
B. Compilation fails because the private attribute p.name cannot be accessed in line 5.
C. To work correctly with hash-based data structures, this class must also implement the hashCode method.
D. When adding Person objects to a java.util.Set collection, the equals method in line 4 will prevent duplicates.

Correct Answer: A

QUESTION 2
Which statements are true about comparing two instances of the same class, given that the equals() and hashCode() methods have been properly overridden? (Choose two)

A. If the equals() method returns true, the haschCode() comparison == might return false.
B. If the equals() method returns false, the haschCode() comparison == might return true.
C. If the hashCode() comparison == returns true, the equals() method must return true.
D. If the hashCode() comparison == returns true, the equals() method might return true.
E. If the hashCode() comparison != returns true, the equals() method might return true.

Correct Answer: BD

QUESTION 3
Which two statements are true about the hashCode method? (Choose two.)

A. The hashCode method for a given class can be used to test for object equality and object inequality for that class.
B. The hashCode method is used by the java.util.SortedSet collection class to order the elements within that set.
C. The hashCode method for a given class can be used to test for object inequality, but NOT object equality, for that class.
D. The only important characteristic of the values returned by a hashCode method is that the distribution of values must follow a Gaussian distribution.
E. The hashCode method is used by the java.util.HashSet collection class to group the elements within that set into hash buckets for swift retrieval.

Correct Answer: CE

QUESTION 4
Which statement is true?

A. A class's finalize() method CANNOT be invoked explicitly.
B. super.finalize() is called implicitly by any overriding finalize() method.
C. The finalize() method for a given object is called no more than once by the garbage collector.
D. The order in which finalize() is called on two objects is based on the order in which the two objects became finalizable.

Correct Answer: C

QUESTION 5
Given:

```
public class Person {
    private String name;
    public Person(String name) {
        this.name = name;
    }
    public int hashCode() {
        return 420;
    }
}
```

Which statement is true?

A. The time to find the value from HashMap with a Person key depends on the size of the map.
B. Deleting a Person key from a HashMap will delete all map entries for all keys of type Person.
C. Inserting a second Person object into a HashSet will cause the first Person object to be removed as a duplicate.
D. The time to determine whether a Person object is contained in a HashSet is constant and does NOT depend on the size of the map.

Correct Answer: A

QUESTION 6
Given:

```
public class Person {
    private String name;
    public Person(String name) {
        this.name = name;
    }
    public boolean equals(Object o) {
        if ( ! ( o instanceof Person) ) return false;
        Person p = (Person) o;
        return p.name.equals(this.name);
    }
}
```

Which statement is true?

A. Compilation fails because the hashCode method is not overridden.
B. A HashSet could contain multiple Person objects with the same name.
C. All Person objects will have the same hash code because the hashCode method is not overridden.
D. If a HashSet contains more than one Person object with name="Fred", then removing another Person, also with name="Fred", will remove them all.

Correct Answer: B

QUESTION 7
Given:

```
public class Key {
    private long id1;
    private long id2;

    // class Key methods
}
```

A programmer is developing a class Key, that will be used as a key in a standard java.util.HashMap. Which

two methods should be overridden to assure that Key works correctly as a key? (Choose two.)

A. `public int hashCode()`
B. `public boolean equals(Key k)`
C. `public int compareTo(Object o)`
D. `public boolean equals(Object o)`
E. `public boolean compareTo(Key k)`

Correct Answer: AD

QUESTION 8
Given:

```
public class Person {
    private String name, comment;
    private int age;

    public Person(String n, int a, String c) {
        name = n;
        age = a;
        comment = c;
    }

    public boolean equals(Object o) {
        if (!(o instanceof Person))
            return false;
        Person p = (Person) o;
        return age == p.age && name.equals(p.name);
    }
}
```

What is the appropriate definition of the hashCode method in class Person?

A. `return super.hashCode();`
B. `return name.hashCode() + age * 7;`
C. `return name.hashCode() + comment.hashCode() / 2;`
D. `return name.hashCode() + comment.hashCode() / 2 - age * 3;`

Correct Answer: B

QUESTION 9
Given:

```
public class Score implements Comparable<Score> {
    private int wins, losses;
    public Score(int w, int l) { wins = w; losses = l; }
    public int getWins() { return wins; }
    public int getLosses() { return losses; }
    public String toString() {
        return "<" + wins + "," + losses + ">";
    }
    // insert code here
}
```

Which method will complete this class?

A. `public int compareTo(Object o){/*more code here*/}`
B. `public int compareTo(Score other){/*more code here*/}`
C. `public int compare(Score s1,Score s2){/*more code here*/}`
D. `public int compare(Object o1,Object o2){/*more code here*/}`

Correct Answer: B

QUESTION 10
Given:

```
public class Drink implements Comparable {
    public String name;
    public int compareTo(Object o) {
        return 0;
    }
}
```

and:

```
Drink one = new Drink();
Drink two = new Drink();
one.name= "Coffee";
two.name= "Tea";
TreeSet set = new TreeSet();
set.add(one);
set.add(two);
```

A programmer iterates over the TreeSet and prints the name of each Drink object. What is the result?

A. Tea
B. Coffee
C. Coffee
   Tea
D. Compilation fails.
E. The code runs with no output.
F. An exception is thrown at runtime.

Correct Answer: B

QUESTION 11
Given a class whose instances, when found in a collection of objects, are sorted by using the compareTo() method, which two statements are true? (Choose two.)

A. The class implements java.lang.Comparable.
B. The class implements java.util.Comparator.
C. The interface used to implement sorting allows this class to define only one sort sequence.
D. The interface used to implement sorting allows this class to define many different sort sequences.

Correct Answer: AC

QUESTION 12
Which three statements are true? (Choose three.)

A. A final method in class X can be abstract if and only if X is abstract.
B. A protected method in class X can be overridden by any subclass of X.
C. A private static method can be called only within other static methods in class X.
D. A non-static public final method in class X can be overridden in any subclass of X.
E. A public static method in class X can be called by a subclass of X without explicitly referencing the class X.
F. A method with the same signature as a private final method in class X can be implemented in a subclass of X.
G. A protected method in class X can be overridden by a subclass of X only if the subclass is in the same package as X.

Correct Answer: BEF