<u>Dashboard</u> / <u>Java</u> / <u>Collection, Generics and Stream API</u> / <u>Test Your Understanding - Collection</u>

Started on	Friday, 27 March 2020, 1:43 AM
State	Finished
Completed on	Friday, 27 March 2020, 1:46 AM
Time taken	3 mins 31 secs
Marks	11.50/13.00
Grade	88.46 out of 100.00

Feedback Congratulations!! You have passed by securing more than 80%

Question **1**

>

Correct

Mark 1.00 out of 1.00

Given:

- 11. public class Person {
- 12. private String name;
- 13. public Person(String name) {
- 14. this.name = name;
- 15. }
- 16. public int hashCode() {
- 17. return 420;
- 18. }
- 19. }

Which statement is true?

Select one:

- a. Inserting a second Person object into a HashSet will cause the first Person object to be removed as a duplicate.
- b. The time to find the value from HashMap with a Person key depends on the size of the map.
- c. 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.
- od. Deleting a Person key from a HashMap will delete all map entries for all keys of type Person.

Your answer is correct.

The correct answer is: The time to find the value from HashMap with a Person key depends on the size of the map.

Question **2**

Incorrect

Mark 0.00 out of 1.00

Serializable is an class inside IO package. Say true or false.

Select one:

True X

False

The correct answer is 'False'.

Your answer is correct.

The correct answer is:

[Java.util.Map] interface provides the capability to store objects using a key-value pair?



public class Score implements Comparable<Score> {
 private int wins, losses;
 public Score(int w, int 1) { wins = w; losses = 1; }
 public int getWins() { return wins; }
 public int getLosses() { return losses; }
 public String toString() {
 return "<" + wins + "," + losses + ">";
 }
 public int compareTo(Score other) {/*more code here*/}
 }
 Which method will complete this class?

public int compare(Score s1,Score s2){/*more code here*/}

public int compareTo(Object o) {/*mode code here*/}

public int compare(Object o1,Object o2){/*more code here*/}

compareTo() is a method of the interface Comparable and it is used to compare the current instance to another one. Hence "compareTo(Score other)" is appropriate.

The correct answer is:

Given

- public class Score implements Comparable<Score> {
- 2. private int wins, losses;
- 3. public Score(int w, int 1) { wins = w; losses = 1; }
- 4. public int getWins() { return wins; }
- 5. public int getLosses() { return losses; }
- 6. public String toString() {
- 7. return "<" + wins + "," + losses + ">";
- 8.
- 9. [public int compareTo(Score other) {/*more code here*/}]

10. }

Which method will complete this class?



Correct

Mark 1.00 out of 1.00

```
String [] names = {"Tina", "Dora", "Higher"};

List<String> list = names.asList();

list.set(0, "Reenu");

System.out.println(names[0]);

Select one:

a. Compiler error on line 3.

b. Reenu

c. Tina
```

Your answer is correct.

● d. Compiler error on line 2.

e. An exception is thrown.

The correct answer is: Compiler error on line 2.

Question **6**

Correct

Mark 1.00 out of 1.00

Given

- 1. import java.util.*;
- 2. public class Old {
- 3. public static Object get0(List list) {
- return list.get(0);
- 5. }
- 6. }

Which will compile successfully?

Select one or more:

- ☑ a. Object o = Old.get0(new LinkedList<Object>());
 ✓
- b. Object o = Old.get0(new LinkedList());
 ✓
- Ø c. String s = (String)Old.get0(new LinkedList<String>());
 ✓

Your answer is correct.

The correct answers are: Object o = Old.get0(new LinkedList());, Object o = Old.get0(new LinkedList<Object>());, String s = (String)Old.get0(new LinkedList<String>());



import java.util.*;
 public class PQ {
 public static void main(String[] args) {
 PriorityQueue<String> pq = new PriorityQueue<String>();
 pq.add("carrot");
 pq.add("banana");
 System.out.println(pq.poll() + ":" + pq.peek());
 }
 What is the result?

Select one:

 a. banana:apple
 b. apple:banana

Select one:

 a. baple:banana

Select one:

 a. baple:banana

Select one:

 b. apple:banana

Select one:

 a. banana:apple

b. apple:banana

 Select one:

poll() method removes and returns the head of the queue, hence apple. peek() method returns, but does not remove the head of the queue. Hence banana.

The correct answer is: apple:banana

c. carrot:apple

d. apple:apple

Question **8**

Correct

Mark 1.00 out of 1.00

Your answer is correct.

The correct answer is:

nextIndex() and previousIndex() are methods of [ListIterator] interface



- . import java.util.*;
- 2. public class WrappedString {
- 3. private String s;
- 4. public WrappedString(String s) { this.s = s; }
- 5. public static void main(String[] args) {
- 6. HashSet<Object> hs = new HashSet<Object>();
- 7. WrappedString ws1 = new WrappedString("aardvark");
- 8. WrappedString ws2 = new WrappedString("aardvark");
- 9. String s1 = new String("aardvark");
- 10. String s2 = new String("aardvark");
- 11. hs.add(ws1); hs.add(ws2); hs.add(s1); hs.add(s2);
- 12. System.out.println(hs.size()); } }

What is the result?

Select one:

- a. 3
- b. 2
- c. 1
- d. 0

Your answer is correct.

The correct answer is: 3



```
import java.util.*;
class Test {
public static void main(String[] args) {
    LinkedList x = new LinkedList();
    x.add("one");
    x.add("two");
    x.add("TWO");
    System.out.println(x.poll());
}

ArrayList x = new ArrayList();
    HashSet x = new HashSet();
```

```
poll() is a method of the collection class LinkedList.
The correct answer is:
Given
import java.util.*;
class Test {
  public static void main(String[] args) {
    [LinkedList x = new LinkedList(); ]
    x.add("one");
    x.add("two");
    x.add("TWO");
    System.out.println(x.poll());
}
```

Question 11

Correct

Mark 1.00 out of 1.00

State true or false. Serialization is the mechanism of saving the state of an object into a file.

Select one:

● True

False

The correct answer is 'True'.



Partially correct

Mark 0.50 out of 1.00

Select one or more:

- a. The hashCode method is used by the java.util.SortedSet collection class to order the elements within that set.
- ☑ b. The hashCode method for a given class can be used to test for object inequality, but NOT object equality, for that class.
- c. The only important characteristic of the values returned by a hashCode method is that the distribution of values must follow a Gaussian distribution.
- d. 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.

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: The hashCode method for a given class can be used to test for object inequality, but NOT object equality, for that class., 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.

Question 13

Correct

Mark 1.00 out of 1.00

int[] myArray = new int[] {1, 2, 3, 4, 5};

What allows you to create a list from this array?

Select one:

- a. List myList = myArray.asList();
- b. List myList = Collections.fromArray(myArray);
- c. List myList = new ArrayList(myArray);
- d. List myList = Arrays.asList(myArray);

Your answer is correct.

The correct answer is: List myList = Arrays.asList(myArray);