

Review Test Submission: Homework 3

User	Brittany Sifford
Course	Java Programming (Intermediate) (92759)
Test	Homework 3
Started	2/6/24 1:52 PM
Submitted	2/6/24 3:12 PM
Due Date	2/25/24 11:59 PM
Status	Completed
Attempt Score	40 out of 40 points
Time Elapsed	1 hour, 19 minutes
Results Displayed	All Answers, Submitted Answers, Correct Answers


Question 1

1 out of 1 points

Which of the following is not an abstract implementation provided by the collections framework?

Selected Answer:  AbstractTree.

Answers: AbstractCollection.

 AbstractTree.


AbstractMap.

AbstractList.

Question 2

1 out of 1 points

Which statement is false?

Selected Answer:  The only operation permitted on the view returned by Arrays method asList is delete, which deletes the value from the view and the backing array.

Answers: When a List is backed by an array, any modifications made through the List view change the array.

When a List is backed by an array, any modifications made to the array change the List view.




The only operation permitted on the view returned by Arrays method asList is delete, which deletes the value from the view and the backing array.

Adding elements to the view returned by Arrays method asList results in an UnsupportedOperationException.

Question 3

1 out of 1 points

Maps allocate keys to values and cannot contain duplicate keys, i.e., the key-to-value mapping is a _____ mapping.

Selected Answer:  one-to-one.

Answers: many-to-many.

many-to-one.

one-to-many.



one-to-one.

Question 4

1 out of 1 points

The classes and interfaces which comprise the collections framework are members of package _____.

Selected Answer:  java.util.

Answers:  java.util.

javax.swing.

java.collections.

java.collection.

Question 5

1 out of 1 points

Which statement is false?

Selected



Answer:

Unmodifiable wrappers throw ModificationExceptions if attempts are made to modify the collection.

Answers:

The Collections API provides a set of public static methods for converting collections to unmodifiable versions.



Unmodifiable wrappers throw ModificationExceptions if attempts are made to modify the collection.

You can use an unmodifiable wrapper to create a collection that offers read-only access to others while allowing read-write access to yourself.

You can create the kind of collection mentioned in part (c) simply by giving others a reference to the unmodifiable wrapper while you also retain a reference to the wrapped collection itself.

Question 6

1 out of 1 points

Which statement is false?

Selected Answer: ☒ A List cannot contain duplicate elements.

Answers: A List is a Collection.

☒ A List cannot contain duplicate elements.

A List is sometimes called a sequence.

Lists use zero-based indices.

Question 7

1 out of 1 points

Objects of many classes can now be output and input with Java's object _____.

Selected Answer: ☒ serialization.

Answers: encapsulation.

overloading.

☒ serialization.

reflection.

Question 8

1 out of 1 points

Which statement is false?

Selected Answer: ☒ Class SortedSet implements TreeSet.

Answer:

Answers: SortedSet extends Set.

☒ Class SortedSet implements TreeSet.

When a HashSet is constructed, it removes any duplicates in the Collection.

By definition, a Set object does not contain any duplicates.

Question 9

1 out of 1 points

Which of the following does not implement interface List?

Selected Answer: ☒ ListIterator.

Answers: ArrayList.

LinkedList.

Vector.

☒ ListIterator.

Question 10

1 out of 1 points

LinkedList method listIterator returns a(n) _____.

Selected Answer: ☒ bidirectional iterator.

Answers: Iterator.

List.

sub list.

☒ bidirectional iterator.

Question 11

1 out of 1 points

Method shuffle is a member of _____.

Selected Answer: ☒ class Collections.

Answers: class Arrays.

☒ class Collections.

interface Collection.

Interface List.

Question 12

1 out of 1 points

Which statement is false?

Selected Answer: ☒ PriorityQueue orders elements in increasing order, so that smallest value will be the first element removed from PriorityQueue.

Answers: Queue is a new collection interface introduced in J2SE 5.0.

Queue and PriorityQueue are included in the java.util package.



PriorityQueue orders elements in increasing order, so that smallest value will be the first element removed from PriorityQueue.

Queue extends interface Collection.

Question 13

1 out of 1 points

Which of the following performs a boxing conversion?

Selected Answer:  Integer x = 7;

Answers: ☐ int x = 7;



Integer x = 7;

☐ Neither of the above.

☐ Both of the above.

Question 14

1 out of 1 points

Which statement is false?

Selected Answer:



If the search key is found, method binarySearch returns the List index (position relative to 1) of the element containing the search key.

Answers:

☐ Java does not guarantee which item will be found first when a binarySearch is performed on a List containing multiple elements equivalent to the search key.



If the search key is found, method binarySearch returns the List index (position relative to 1) of the element containing the search key.

☐ The binary search algorithm is fast.

☐ Method binarySearch takes a List as the first argument.

Question 15

1 out of 1 points

The collections framework provides various _____ collection interfaces from which the programmer can quickly "flesh out" complete customized implementations.

Selected Answer:  abstract.

Answers: ☐ abstract.



concrete.

structured.

unstructured.

Question 16

1 out of 1 points

Which of the following performs an unboxing conversion? Assume x refers to an Integer object.

Selected Answer: ☒ int y = x;

Answers: ☒ int y = x;

☐ Integer y = x;

☐ Neither of the above.

☐ Both of the above.

Question 17

1 out of 1 points

Which statement is false?

Selected Answer: ☒ Class ArrayList is a fixed-size array.

Answers: ☐ A ListIterator accesses the elements of a List.

☒ Class ArrayList is a fixed-size array.

☐ A LinkedList is a linked list implementation of a List.

☐ ArrayLists execute faster than Vectors because they are not thread safe.

Question 18

1 out of 1 points

Which statement is false?

Selected Answer: ☒ All built-in collections are synchronized.

Answers: ☒ All built-in collections are synchronized.

☐ Concurrent access to a Collection by multiple threads could cause indeterminate results or fatal errors.

☐ To prevent potential threading problems, synchronization wrappers are used around collection classes that might be accessed by multiple threads.

A synchronization wrapper class receives method calls, adds some functionality for thread safety and then delegates the calls to the wrapped class.

Question 19

1 out of 1 points

A Properties object is a _____ Hashtable object.

Selected Answer: ☒ persistent.

Answers: transient.

- ☒ persistent.
- polymorphic.
- protected.

Question 20

1 out of 1 points

If the desired Object is not found, binarySearch returns _____.

Selected Answer: ☒ a negative value

Answers: a positive value

- zero
- ☒ a negative value
- an ObjectNotFoundError.

Question 21

1 out of 1 points

_____ methods enable a program to view a portion of a collection.

Selected Answer: ☒ Range-view.

Answers: Focus-view.

- ☒ Range-view.
- Delimiter-view.
- Subset-view.

Question 22

1 out of 1 points

Which statement is false?

Selected

Answer:



Collections discourage software reuse because they are non-portable.

Answers:

A collection is an object that can hold references to other objects.

The collection interfaces declare the operations that can be performed on each type of collection.



Collections discourage software reuse because they are non-portable.

Collections are carefully constructed for rapid execution and efficient use of memory.

Question 23

1 out of 1 points

Collections method _____ returns true if two Collections have no elements in common.

Selected Answer:  disjoint.

Answers:

shuffle.

contains.

hasCommon.



disjoint.

Question 24

1 out of 1 points

Iterator method _____ determines whether the Collection contains more elements.

Selected Answer:  hasNext.

Answers:



hasNext.

next.

contains.

containsNext.

Question 25

1 out of 1 points

Interface Collection contains _____ operations (i.e., operations performed on the entire collection).

Selected Answer:  bulk.

Answers:

- aggregate.
- composite.
- integral.
- ☒ bulk.

Question 26

1 out of 1 points

PriorityQueue method _____ inserts an element at the appropriate location in the queue.

Selected Answer: ☒ offer.

Answers:

- ☒ offer.
- push.
- poll.
- peek.

Question 27

1 out of 1 points

Collections method _____ returns a Comparator object that orders the collection's elements in reverse order.

Selected Answer: ☒ reverseOrder.

Answers:

- rotate.
- shuffle.
- reverse.
- ☒ reverseOrder.

Question 28

1 out of 1 points

Algorithm _____ randomly orders a List's elements.

Selected Answer: ☒ shuffle.

Answers:

- randomShuffle.
- randomPlacement.
- fiftyTwoCardPickup.
- ☒ shuffle.

Question 29

1 out of 1 points

Which of these is not an example of a "real-life" collection?

Selected Answer: ☒ The number of pages in a book.

- Answers:
- ☐ The cards you hold in a card game.
 - ☐ Your favorite songs stored in your computer.
 - ☐ The players on a soccer team.
 - ☒ The number of pages in a book.

Question 30

1 out of 1 points

Stack method _____ looks at the top element of a stack without removing that element.

Selected Answer: ☒ peek.

- Answers:
- ☐ glance.
 - ☒ peek.
 - ☐ look.
 - ☐ sample.

Question 31

1 out of 1 points

Map method _____ is used to determine whether a map contains a mapping for the specified key.

Selected Answer: ☒ containsKey

- Answers:
- ☒ containsKey
 - ☐ hasKey
 - ☐ containsMapping
 - ☐ hasMapping

Question 32

1 out of 1 points

Which statement about hashing is false?

Selected Answer: ☒ A load factor of 1.0 usually results in good hashing performance, but less efficient utilization of memory.

Answers:

Hashing facilitates high-speed storing and retrieval of data.

Two different data items can hash to the same cell; this is called a collision.

A load factor of 0.5 usually results in good hashing performance, but less efficient utilization of memory.



A load factor of 1.0 usually results in good hashing performance, but less efficient utilization of memory.

Question 33


1 out of 1 points

Java supports type inferencing with the <> notation in statements that declare and create generic type variables and objects. For example, the following line:

`List<String> list = new ArrayList<String>();`
can be written as:

Selected Answer:  `List<String> list = new ArrayList<>();`

Answers:


`List<> list = new ArrayList<>();``List<> list = new ArrayList<String>();` `List<String> list = new ArrayList<>();``List<String> list = new ArrayList();`**Question 34**

1 out of 1 points

Class Collections provides algorithms for reversing, filling and copying _____.

Selected Answer:  Lists.

Answers:

 Lists.

Collections.

Arrays.

Stacks.

Question 35

1 out of 1 points

If no elements are in the Stack, method pop throws an _____.

Selected Answer:  `EmptyStackException`.

Answers:

`OutOfMemoryError`.`OutOfMemoryException`.

EmptyStackError.

☒ EmptyStackException.

Question 36

1 out of 1 points

A(n) _____ allows a program to walk through the collection and remove elements from the collection.

Selected Answer: ☒ Iterator.

Answers: Set.

Queue.

☒ Iterator.

List.

Question 37

1 out of 1 points

Comparator method compare should return _____ if the first argument is greater than the second argument.

Selected Answer: ☒ a positive int value.

Answers: ☒ a positive int value.

zero.

a negative int value.

a String.

Question 38

1 out of 1 points

Collections method sort that accepts a List as an argument. It sorts the List elements, which must implement the _____ interface.

Selected Answer: ☒ Comparable.

Answers: ☒ Comparable.

Comparator.

Compare.

Ordering.

Question 39

1 out of 1 points

Which statement is false?

Selected



Answer:

The methods for primitive types correspond to the methods for the corresponding type-wrapper classes.

Answers:

Each primitive type has a corresponding type-wrapper class.

The type-wrapper classes enable you to manipulate primitive-type values as objects.

Type-wrapper classes are final, so you cannot extend them.




The methods for primitive types correspond to the methods for the corresponding type-wrapper classes.

Question 40

1 out of 1 points

To find the smallest and largest element of a Collection, use Collections methods _____ and _____.

Selected Answer:  min, max.

Answers:

least, greatest.

smallest, largest.

first, last.



min, max.

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