


Review Test Submission: Homework 8


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Course	Java Programming (Intermediate) (92759)
Test	Homework 8
Started	3/26/24 11:49 AM
Submitted	3/26/24 12:26 PM
Due Date	4/14/24 11:59 PM
Status	Completed
Attempt Score	25 out of 25 points
Time Elapsed	37 minutes
Results Displayed	All Answers, Submitted Answers, Correct Answers

Question 1

1 out of 1 points

The technique of implementing each stack method as a call to a List method is called _____.


Selected Answer:  delegation.


Answers:  delegation.
☐ delimiting.
☐ assigning.
☐ shifting responsibility.

Question 2

1 out of 1 points

The import declaration `import *;` _____.

Selected Answer:  causes a compilation error.

Answers:  causes a compilation error.
☐ imports all classes in the library.
☐ imports the default classes in the library.
☐ imports the classes in package `java.lang`.

Question 3

1 out of 1 points

Which statement about trees is false?

Selected Answer: ☒ Each node in a tree contains two links.

Answers: ☐ A tree is a nonlinear, two-dimensional data structure.

☒ Each node in a tree contains two links.

☐ The children of a node are called siblings.

☐ A node with no children is called a leaf node.

Question 4

1 out of 1 points

List nodes normally are not necessarily stored in contiguous memory. Rather, they're _____ contiguous.

Selected Answer: ☒ logically

Answers: ☐ physically

☐ approximately

☐ comparably

☒ logically

Question 5

1 out of 1 points

Java performs automatic _____ of objects that are no longer referenced in a program.

Selected Answer: ☒ garbage collection.

Answers: ☐ memory distribution.

☒ garbage collection.

☐ storage compression.

☐ trash aggregation.

Question 6

1 out of 1 points

Which statement is false?

Selected Answer: ☒ A linked list is a fixed-size data structure.

Answer:

Answers:

A linked list is a linear collection of self-referential class objects called nodes connected by reference links.

A linked list is appropriate when the number of data elements to be represented in the data structure is unpredictable.

☒ A linked list is a fixed-size data structure.

By convention, the link reference in the last node of a list is set to null to mark the end of the list.

Question 7

1 out of 1 points

Which statement is false?

Selected



Answer:

The program execution stack contains the space created for a method's global variables on each invocation of that method during a program's execution.

Answers:

When a method call is made, the called method must know how to return to its caller, so the return address is pushed onto the program execution stack.

Stacks support recursive method calls in the same manner as conventional, nonrecursive method calls.



The program execution stack contains the space created for a method's global variables on each invocation of that method during a program's execution.

When a method returns to its caller, the memory for that method's local variables is popped off the stack and those variables are no longer known to the program.

Question 8

1 out of 1 points

A queue is a _____ data structure.

Selected Answer: ☒ FIFO.

Answers:

FOFI.

☒ FIFO.

OFIF.

IFOOF.

Question 9

1 out of 1 points

A _____ class contains a reference member that refers to an object of the same class type.

Selected Answer: ☒ self-referential.

Answers: self-determining.
self-pointing.
self-linking.
☒ self-referential.

Question 10

1 out of 1 points

Which of the following statements is true?

Selected Answer: ☒ Predicate methods typically test a condition and do not modify the object on which they're called.

Answers: Predicate methods typically test a condition and modify the object on which they're called.

Predicate methods typically do not test a condition and do not modify the object on which they're called.

☒ Predicate methods typically test a condition and do not modify the object on which they're called.

Predicate methods typically do not test a condition and modify the object on which they're called.

Question 11

1 out of 1 points

If no memory is available, keyword new throws an _____.

Selected Answer: ☒ OutOfMemoryError.

Answers: OutOfMemoryException.
OutOfMemoryEvent.
OutOfMemoryExhaustion.
☒ OutOfMemoryError.

Question 12

1 out of 1 points

A stack is a _____ data structure.

Selected Answer: ☒ LIFO.

Answers: FILO.

FOLI.

LOFI.

☒ LIFO.**Question 13**

1 out of 1 points

The classpath consists of a list of directories or archive files, each separated by a _____ on Windows or a _____ on UNIX/Linux/Max OS X.

Selected Answer: ☒ semicolon (;), colon (:).

Answers:

- ☐ colon (:), semicolon (;).
- ☒ semicolon (;), colon (:).
- ☐ comma (,), semicolon (;).
- ☐ semicolon (;), comma (,).

Question 14

1 out of 1 points

Which is not a typical application of queues?

Selected Answer: ☒ High-speed sorting.

Answers:

- ☐ Routing packets in a computer network.
- ☐ File server handling file access requests from many clients.
- ☒ High-speed sorting.
- ☐ Print spooling.

Question 15

1 out of 1 points

A package is:

Selected Answer: ☒ All of the above.

Answers:

- ☐ A directory structure used to organize classes and interfaces.
- ☐ A mechanism for software reuse.
- ☐ A group of related classes and interfaces.
- ☒ All of the above.

Question 16

1 out of 1 points

Which statement is false?

Selected



Answer:

Searching a binary tree for a value that matches a key value is slow for loosely packed trees.

Answers:

In a tightly packed binary tree, each level contains about twice as many elements as the previous level.

When searching a tightly packed 1,000,000-element binary search tree, approximately 20 comparisons need to be made.

The level-order traversal of a binary tree visits the nodes of the tree row-by-row starting at the root node level.



Searching a binary tree for a value that matches a key value is slow for loosely packed trees.

Question 17

1 out of 1 points

Which statement is false?

Selected



Answer:

A node can be inserted at any point in a binary search tree.

Answers:

The shape of a binary search tree that corresponds to a set of data can vary, depending on the order in which the values are inserted into the tree.



A node can be inserted at any point in a binary search tree.

The process of creating a binary search tree actually sorts the data, and thus this process is called the binary tree sort.

The binary search tree facilitates duplicate elimination.

Question 18

1 out of 1 points

By default, the classpath consists only of the _____. However, the classpath can be modified by providing the _____ option to the javac compiler.

Selected Answer:



current directory, -classpath.

Answers:

root directory of the package, -d.

current directory, -d.

root directory of the package, -classpath.



current directory, -classpath.

Question 19

1 out of 1 points

Usually a _____ in Java code indicates the end of a data structure.

Selected Answer: ☒ null reference.

Answers:

- ☐ backslash character.
- ☐ forward slash character
- ☒ null reference.
- ☐ null pointer.

Question 20

1 out of 1 points

Queue nodes are removed only from the _____ of the queue, and are inserted only at the _____ of the queue.

Selected Answer: ☒ head, tail.

Answers:

- ☐ tail, tail.
- ☐ tail, head.
- ☒ head, tail.
- ☐ head, head.

Question 21

1 out of 1 points

When compiling a class in a package, the javac command-line option _____ causes the javac compiler to create appropriate directories based on the class's package declaration.

Selected Answer: ☒ -d

Answers:

- ☐ -p
- ☐ -a
- ☒ -d
- ☐ -dir

Question 22

1 out of 1 points

Which statement is false?

Selected Answer: ☒ Insertions and deletions are made only at one end of a queue, its tail.

Answers:

- ☐ Linked lists are collections of data items "lined up in a row"-- insertions and deletions can be made anywhere in a linked list.

Insertions and deletions are made only at one end of a stack, its top.




Insertions and deletions are made only at one end of a queue, its tail.

Binary trees facilitate high-speed searching and sorting of data.

Question 23

1 out of 1 points

An isEmpty method you write to test whether a linked list is empty is called a _____ method.

Selected Answer:  predicate.

Answers: predefined.



predicate.


preemption.

preorder.

Question 24

1 out of 1 points

The import declaration import java.util.*; is known as a _____.

Selected Answer:  type-import-on-demand declaration.

Answers: single-type-import declaration.

all-type-import declaration.

multiple-import declaration.




type-import-on-demand declaration.

Question 25

1 out of 1 points

A class within a package must be declared public if

Selected Answer:  It will be used by classes that are not in the same package.

Answers: It will be used only by other classes in the same package.



It will be used by classes that are not in the same package.

It is in the same directory as the other classes in the package.

It has a unique name.

Monday, May 6, 2024 10:23:47 AM CDT

← OK