Oracle 1z0-851

Java Standard Edition 6 Programmer Certified Professional Exam

Practice Test

Version: 4.2

QUESTION NO: 1

Given a pre-generics implementation of a method:

```
11. public static int sum(List list) {
12. int sum = 0;
13. for ( Iterator iter = list.iterator(); iter.hasNext(); ) {
14. int i = ((Integer)iter.next()).intValue();
15. sum += i;
16. }
17. return sum;
18. }
```

What three changes allow the class to be used with generics and avoid an unchecked warning? (Choose three.)

A. Remove line 14.
B. Replace line 14 with "int i = iter.next();".
C. Replace line 13 with "for (int i : intList) {".
D. Replace line 13 with "for (Iterator iter : intList) {".
E. Replace the method declaration with "sum(List<int> intList)".
F. Replace the method declaration with "sum(List<Integer> intList)".

Answer: A,C,F
Explanation:

QUESTION NO: 2

A programmer has an algorithm that requires a java.util.List that provides an efficient implementation of add(0, object), but does NOT need to support quick random access. What supports these requirements?

A. java.util.Queue
B. java.util.ArrayList
C. java.util.LinearList
D. java.util.LinkedList

Answer: D

Explanation:

QUESTION NO: 3

Given:

```
11. // insert code here
12. private N min, max;
13. public N getMin() { return min; }
14. public N getMax() { return max; }
15. public void add(N added) {
16. if (min == null || added.doubleValue() < min.doubleValue())
17. min = added;
18. if (max == null || added.doubleValue() > max.doubleValue())
19. max = added;
20. }
21. }
```

Which two, inserted at line 11, will allow the code to compile? (Choose two.)

A. public class MinMax<?> {
B. public class MinMax<? extends Number> {
C. public class MinMax<N extends Object> {
D. public class MinMax<N extends Number> {
E. public class MinMax<? extends Object> {
F. public class MinMax<N extends Integer> {

Answer: D,F
Explanation:

QUESTION NO: 4

Given:

```
12. import java.util.*;
```

13. public class Explorer2 {

14. public static void main(String[] args) {

15. TreeSet<Integer> s = new TreeSet<Integer>();

16. TreeSet<Integer> subs = new TreeSet<Integer>();

17. for(int i = 606; i < 613; i++)

18. if(i%2 == 0) s.add(i);

19. subs = (TreeSet)s.subSet(608, true, 611, true);

20. s.add(629);

21. System.out.println(s + " " + subs);

22. }

23. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. [608, 610, 612, 629] [608, 610]
D. [608, 610, 612, 629] [608, 610, 629]
E. [606, 608, 610, 612, 629] [608, 610]
F. [606, 608, 610, 612, 629] [608, 610, 629]

Answer: E
Explanation:

QUESTION NO: 5

Given:

1. public class Score implements Comparable<Score> {

2. private int wins, losses;

3. public Score(int w, int l) { wins = w; losses = l; }

4. public int getWins() { return wins; }

5. public int getLosses() { return losses; }

6. public String toString() {

7. return "<" + wins + "," + losses + ">";

8. }

9. // insert code here

10. }

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*/}

Answer: B
Explanation:

QUESTION NO: 6

Given:

11. public class Person {

12. private name;

13. public Person(String name) {

14. this.name = name;

15. }

16. public int hashCode() {

17. return 420;

18. }

19. }

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.

Answer: A
Explanation:

QUESTION NO: 7

Given:

5. import java.util.*;

6. public class SortOf {

7. public static void main(String[] args) {

8. ArrayList<Integer> a = new ArrayList<Integer>();

9. a.add(1); a.add(5); a.add(3);

11. Collections.sort(a);

12. a.add(2);

13. Collections.reverse(a);

14. System.out.println(a);

15. }

16. }

What is the result?

A. [1, 2, 3, 5]
B. [2, 1, 3, 5]
C. [2, 5, 3, 1]
D. [5, 3, 2, 1]
E. [1, 3, 5, 2]
F. Compilation fails.
G. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 8

Given

11. public interface Status {

12. /* insert code here */ int MY_VALUE = 10;

13. } Which three are valid on line

12?

(Choose three.)

A. final
B. static
C. native
D. public
E. private
F. abstract
G. protected

Answer: A,B,D
Explanation:

QUESTION NO: 9

Given:

5. class Atom {

6. Atom() { System.out.print("atom "); }

7. }

8. class Rock extends Atom {

9. Rock(String type) { System.out.print(type); }

10. }

11. public class Mountain extends Rock {

12. Mountain() {

13. super("granite ");

14. new Rock("granite ");

15. }

16. public static void main(String[] a) { new Mountain(); }

17. }

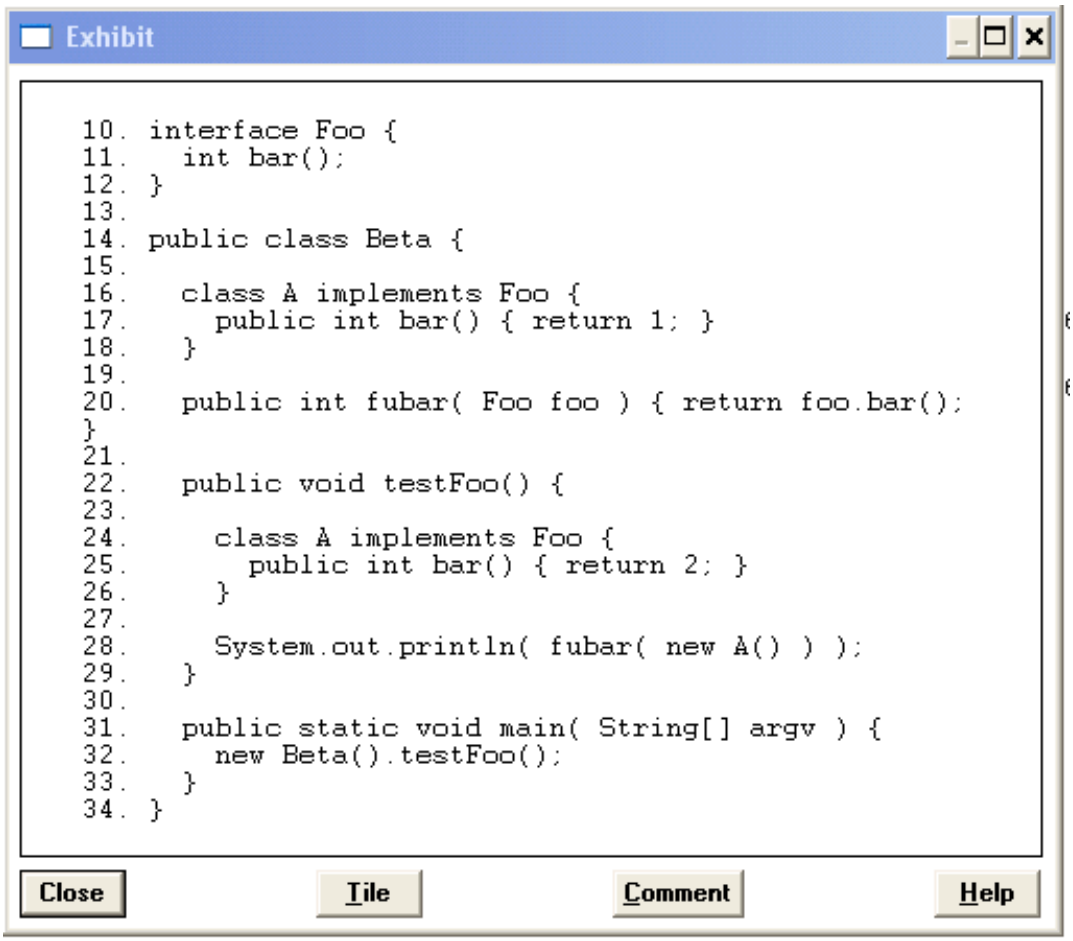
What is the result?

A. Compilation fails.
B. atom granite
C. granite granite
D. atom granite granite
E. An exception is thrown at runtime.
F. atom granite atom granite

Answer: F
Explanation:

QUESTION NO: 10

Click the Exhibit button. Which three statements are true? (Choose three.)



A. Compilation fails.
B. The code compiles and the output is 2.
C. If lines 16, 17 and 18 were removed, compilation would fail.
D. If lines 24, 25 and 26 were removed, compilation would fail.
E. If lines 16, 17 and 18 were removed, the code would compile and the output would be 2.
F. If lines 24, 25 and 26 were removed, the code would compile and the output would be 1.

Answer: B,E,F
Explanation:

QUESTION NO: 11

Given:

10. class Line {

11. public class Point { public int x,y;}

12. public Point getPoint() { return new Point(); }

13. }

14. class Triangle {

15. public Triangle() {

16. // insert code here

17. }

18. }

Which code, inserted at line 16, correctly retrieves a local instance of a Point object?

A. Point p = Line.getPoint();
B. Line.Point p = Line.getPoint();
C. Point p = (new Line()).getPoint();
D. Line.Point p = (new Line()).getPoint();

Answer: D
Explanation:

QUESTION NO: 12

Given:

11. class Alpha {

12. public void foo() { System.out.print("Afoo "); }

13. }

14. public class Beta extends Alpha {

15. public void foo() { System.out.print("Bfoo "); }

16. public static void main(String[] args) {

17. Alpha a = new Beta();

18. Beta b = (Beta)a;

19. a.foo();

20. b.foo();

21. }

22. }

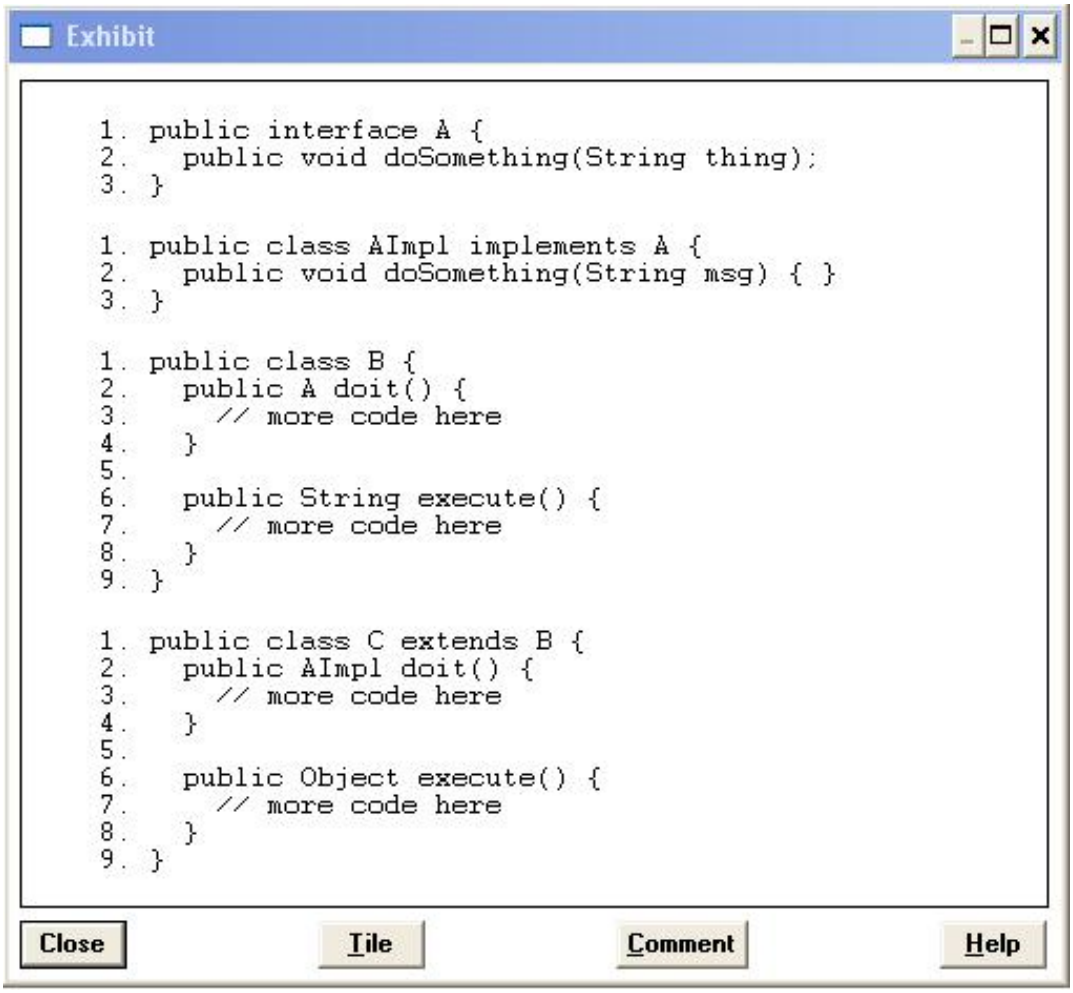
What is the result?

A. Afoo Afoo
B. Afoo Bfoo
C. Bfoo Afoo
D. Bfoo Bfoo
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 13

Click the Exhibit button. Which statement is true about the classes and interfaces in the exhibit?



A. Compilation will succeed for all classes and interfaces.
B. Compilation of class C will fail because of an error in line 2.
C. Compilation of class C will fail because of an error in line 6.
D. Compilation of class AImpl will fail because of an error in line 2.

Answer: C

Explanation:

QUESTION NO: 14

Which two code fragments correctly create and initialize a static array of int elements? (Choose two.)

A. static final int[] a = { 100,200 };
B. static final int[] a;
static { a=new int[2]; a[0]=100; a[1]=200; }
C. static final int[] a = new int[2]{ 100,200 };
D. static final int[] a;
static void init() { a = new int[3]; a[0]=100; a[1]=200; }

Answer: A,B
Explanation:

QUESTION NO: 15

Given:

10. interface Foo { int bar(); }

11. public class Sprite {

12. public int fubar(Foo foo) { return foo.bar(); }

13. public void testFoo() {

14. fubar(

15. // insert code here

16.);

17. }

18. }

Which code, inserted at line 15, allows the class Sprite to compile?

A. Foo { public int bar() { return 1; }
B. new Foo { public int bar() { return 1; }
C. new Foo() { public int bar() { return 1; }

D. new class Foo { public int bar() { return 1; }

Answer: C
Explanation:

QUESTION NO: 16

Given:

1. class Alligator {

2. public static void main(String[] args) {

3. int []x[] = {{1,2}, {3,4,5}, {6,7,8,9}};

4. int [][]y = x;

5. System.out.println(y[2][1]);

6. }

7. }

What is the result?

A. 2
B. 3
C. 4
D. 6
E. 7
F. Compilation fails.

Answer: E
Explanation:

QUESTION NO: 17

Given:

22. StringBuilder sb1 = new StringBuilder("123");

23. String s1 = "123";

24. // insert code here

25. System.out.println(sb1 + " " + s1);

Which code fragment, inserted at line 24, outputs "123abc 123abc"?

A. sb1.append("abc"); s1.append("abc");
B. sb1.append("abc"); s1.concat("abc");
C. sb1.concat("abc"); s1.append("abc");
D. sb1.concat("abc"); s1.concat("abc");
E. sb1.append("abc"); s1 = s1.concat("abc");
F. sb1.concat("abc"); s1 = s1.concat("abc");
G. sb1.append("abc"); s1 = s1 + s1.concat("abc");
H. sb1.concat("abc"); s1 = s1 + s1.concat("abc");

Answer: E
Explanation:

QUESTION NO: 18

Given that the current directory is empty, and that the user has read and write permissions, and the following:

11. import java.io.*;

12. public class DOS {

13. public static void main(String[] args) {

14. File dir = new File("dir");

15. dir.mkdir();

16. File f1 = new File(dir, "f1.txt");

17. try {

18. f1.createNewFile();

19. } catch (IOException e) { ; }

20. File newDir = new File("newDir");

21. dir.renameTo(newDir);

22. }

23. }

Which statement is true?

A. Compilation fails.
B. The file system has a new empty directory named dir.
C. The file system has a new empty directory named newDir.
D. The file system has a directory named dir, containing a file f1.txt.
E. The file system has a directory named newDir, containing a file f1.txt.

Answer: E
Explanation:

QUESTION NO: 19

Given:

```
11. class Converter {
12. public static void main(String[] args) {
13. Integer i = args[0];
14. int j = 12;
15. System.out.println("It is " + (j==i) + " that j==i.");
16. }
17. }
```

What is the result when the programmer attempts to compile the code and run it with the command java Converter 12?

A. It is true that j==i.
B. It is false that j==i.
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 13.

Answer: D
Explanation:

QUESTION NO: 20

Given:

```
11. String test = "Test A. Test B. Test C.";
12. // insert code here
```

13. String[] result = test.split(regex);

Which regular expression, inserted at line 12, correctly splits test into "Test A", "Test B", and "Test C"?

A. String regex = "";
B. String regex = " ";
C. String regex = ".*";
D. String regex = "\\s";
E. String regex = "\\.\\s*";
F. String regex = "\\w[\.] +";

Answer: E
Explanation:

QUESTION NO: 21

Given:

5. import java.util.Date;

6. import java.text.DateFormat;

21. DateFormat df;

22. Date date = new Date();

23. // insert code here

24. String s = df.format(date);

Which code fragment, inserted at line 23, allows the code to compile?

A. df = new DateFormat();
B. df = Date.getFormat();
C. df = date.getFormat();
D. df = DateFormat.getFormat();
E. df = DateFormat.getInstance();

Answer: E
Explanation:

QUESTION NO: 22

Given a class Repetition:

1. package utils;

2.

3. public class Repetition {

4. public static String twice(String s) { return s + s; }

5. } and given another class Demo: 1. // insert code here

2.

3. public class Demo {

4. public static void main(String[] args) {

5. System.out.println(twice("pizza"));

6. }

7. }

Which code should be inserted at line 1 of Demo.java to compile and run Demo to print "pizzapizza"?

A. import utils.*;
B. static import utils.*;
C. import utils.Repetition.*;
D. static import utils.Repetition.*;
E. import utils.Repetition.twice();
F. import static utils.Repetition.twice;
G. static import utils.Repetition.twice;

Answer: F

Explanation:

QUESTION NO: 23

A UNIX user named Bob wants to replace his chess program with a new one, but he is not sure where the old one is installed. Bob is currently able to run a Java chess program starting from his home directory /home/bob using the command: java -classpath /test:/home/bob/downloads/*.jar games.Chess Bob's CLASSPATH is set (at login time) to: /usr/lib:/home/bob/classes:/opt/java/lib:/opt/java/lib/*.jar What is a possible location for the Chess.class file?

A. /test/Chess.class
B. /home/bob/Chess.class
C. /test/games/Chess.class
D. /usr/lib/games/Chess.class
E. /home/bob/games/Chess.class
F. inside jarfile /opt/java/lib/Games.jar (with a correct manifest)
G. inside jarfile /home/bob/downloads/Games.jar (with a correct manifest)

Answer: C
Explanation:

QUESTION NO: 24

Given:

```
3. interface Animal { void makeNoise(); }
4. class Horse implements Animal {
5. Long weight = 1200L;
6. public void makeNoise() { System.out.println("whinny"); }
7. }
8. public class Icelandic extends Horse {
9. public void makeNoise() { System.out.println("vinny"); }
10. public static void main(String[] args) {
11. Icelandic i1 = new Icelandic();
12. Icelandic i2 = new Icelandic();
13. Icelandic i3 = new Icelandic();
14. i3 = i1; i1 = i2; i2 = null; i3 = i1;
15. }
16. }
```

When line 15 is reached, how many objects are eligible for the garbage collector?

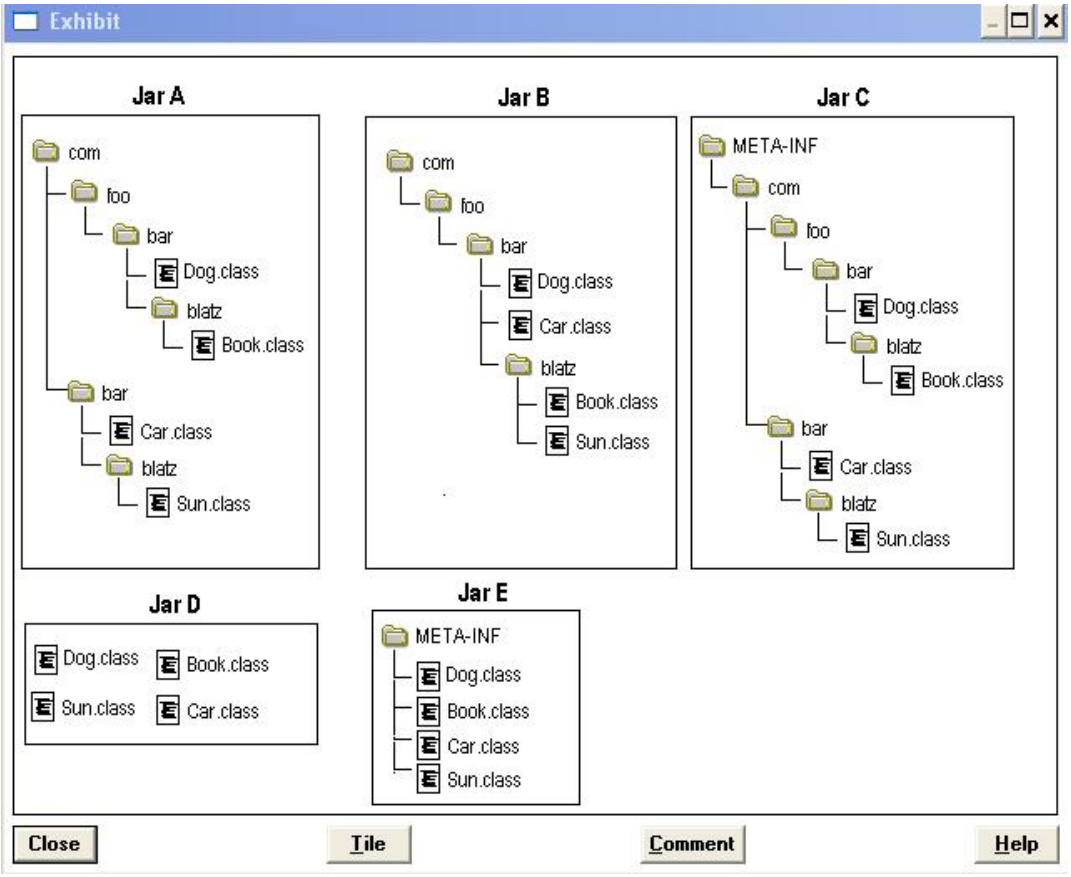
A. 0
B. 1
C. 2

D. 3
E. 4
F. 6

Answer: E
Explanation:

QUESTION NO: 25

Click the Exhibit button. Given the fully-qualified class names: com.foo.bar.Dog com.foo.bar.blatz.Book com.bar.Car com.bar.blatz.Sun Which graph represents the correct directory structure for a JAR file from which those classes can be used by the compiler and JVM?



A. Jar A
B. Jar B
C. Jar C
D. Jar D
E. Jar E

Answer: A
Explanation:

QUESTION NO: 26

Given classes defined in two different files:

1. package util;

2. public class BitUtils {

3. private static void process(byte[] b) {}

4. }

1. package app; 2

. public class SomeApp {

3. public static void main(String[] args) {

4. byte[] bytes = new byte[256];

5. // insert code here

6. }

7. }

What is required at line 5 in class SomeApp to use the process method of BitUtils?

A. process(bytes);
B. BitUtils.process(bytes);
C. app.BitUtils.process(bytes);
D. util.BitUtils.process(bytes);
E. import util.BitUtils.*; process(bytes);
F. SomeApp cannot use the process method in BitUtils.

Answer: F
Explanation:

QUESTION NO: 27

Given:

11. public class ItemTest {

12. private final int id;

13. public ItemTest(int id) { this.id = id; }

14. public void updateId(int newId) { id = newId; }

15.

16. public static void main(String[] args) {

17. ItemTest fa = new ItemTest(42);

18. fa.updateId(69);

19. System.out.println(fa.id);

20. }

21. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The attribute id in the ItemTest object remains unchanged.
D. The attribute id in the ItemTest object is modified to the new value.
E. A new ItemTest object is created with the preferred value in the id attribute.

Answer: A
Explanation:

QUESTION NO: 28

Given:

13. public class Pass {

14. public static void main(String [] args) {

15. int x = 5;

16. Pass p = new Pass();

17. p.doStuff(x);

18. System.out.print(" main x = " + x);

19. }

20.

21. void doStuff(int x) {

22. System.out.print(" doStuff x = " + x++);

23. }

24. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. doStuff x = 6 main x = 6
D. doStuff x = 5 main x = 5
E. doStuff x = 5 main x = 6
F. doStuff x = 6 main x = 5

Answer: D
Explanation:

QUESTION NO: 29

Given:

1. public class GC {

2. private Object o;

3. private void doSomethingElse(Object obj) { o = obj; }

4. public void doSomething() {

5. Object o = new Object();

6. doSomethingElse(o);

7. o = new Object();

8. doSomethingElse(null);

9. o = null;

10. }

11. }

When the doSomething method is called, after which line does the Object created in line 5 become available for garbage collection?

A. Line 5
B. Line 6
C. Line 7
D. Line 8
E. Line 9
F. Line 10

Answer: D
Explanation:

QUESTION NO: 30

Given:

11. public static void test(String str) {

12. int check = 4;

13. if (check = str.length()) {

14. System.out.print(str.charAt(check -= 1) +", ");

15. } else {

16. System.out.print(str.charAt(0) + ", ");

17. }

18. } and the invocation:

21. test("four");

22. test("tee");

23. test("to");

What is the result?

A. r, t, t,
B. r, e, o,
C. Compilation fails.
D. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 31

Given:

1. interface A { public void aMethod(); }

2. interface B { public void bMethod(); }

3. interface C extends A,B { public void cMethod(); }

4. class D implements B {

5. public void bMethod(){}

6. }

7. class E extends D implements C {

8. public void aMethod(){}

9. public void bMethod(){}

10. public void cMethod(){}

11. }

What is the result?

A. Compilation fails because of an error in line 3.
B. Compilation fails because of an error in line 7.
C. Compilation fails because of an error in line 9.
D. If you define D e = new E(), then e.bMethod() invokes the version of bMethod() defined in Line 5.
E. If you define D e = (D)(new E()), then e.bMethod() invokes the version of bMethod() defined in Line 5.
F. If you define D e = (D)(new E()), then e.bMethod() invokes the version of bMethod() defined in Line 9.

Answer: F
Explanation:

QUESTION NO: 32

Given that: Gadget has-a Sprocket and Gadget has-a Spring and Gadget is-a Widget and Widget has-a Sprocket Which two code fragments represent these relationships? (Choose two.)

A. class Widget { Sprocket s; }
class Gadget extends Widget { Spring s; }
B. class Widget { }
class Gadget extends Widget { Spring s1; Sprocket s2; }
C. class Widget { Sprocket s1; Spring s2; }
class Gadget extends Widget { }
D. class Gadget { Spring s; }
class Widget extends Gadget{ Sprocket s; }
E. class Gadget { }
class Widget extends Gadget{ Sprocket s1; Spring s2; }
F. class Gadget { Spring s1; Sprocket s2; }
class Widget extends Gadget{ }

Answer: A,C

Explanation:

QUESTION NO: 33

A company that makes Computer Assisted Design (CAD) software has, within its application, some utility classes that are used to perform 3D rendering tasks. The company's chief scientist has just improved the performance of one of the utility classes' key rendering algorithms, and has assigned a programmer to replace the old algorithm with the new algorithm. When the programmer begins researching the utility classes, she is happy to discover that the algorithm to be replaced exists in only one class. The programmer reviews that class's API, and replaces the old algorithm with the new algorithm, being careful that her changes adhere strictly to the class's API. Once testing has begun, the programmer discovers that other classes that use the class she changed are no longer working properly. What design flaw is most likely the cause of these new bugs?

A. Inheritance
B. Tight coupling
C. Low cohesion
D. High cohesion
E. Loose coupling
F. Object immutability

Answer: B

Explanation:

QUESTION NO: 34

Which Man class properly represents the relationship "Man has a best friend who is a Dog"?

A. class Man extends Dog { }
B. class Man implements Dog { }
C. class Man { private BestFriend dog; }
D. class Man { private Dog bestFriend; }
E. class Man { private Dog<bestFriend>; }
F. class Man { private BestFriend<dog>; }

Answer: D
Explanation:

QUESTION NO: 35

Given:

31. class Foo {

32. public int a = 3;

33. public void addFive() { a += 5; System.out.print("f "); }

34. }

35. class Bar extends Foo {

36. public int a = 8;

37. public void addFive() { this.a += 5; System.out.print("b "); }

38. } Invoked with: Foo f = new Bar(); f.addFive(); System.out.println(f.a);

What is the result?

A. b 3
B. b 8
C. b 13
D. f 3
E. f 8
F. f 13
G. Compilation fails.
H. An exception is thrown at runtime.

Answer: A
Explanation:

QUESTION NO: 36

Given:

11. class Animal { public String noise() { return "peep"; } }

12. class Dog extends Animal {

13. public String noise() { return "bark"; }

14. }

15. class Cat extends Animal {

16. public String noise() { return "meow"; }

17. } ...

30. Animal animal = new Dog();

31. Cat cat = (Cat)animal;

32. System.out.println(cat.noise());

What is the result?

A. peep
B. bark
C. meow
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: E
Explanation:

QUESTION NO: 37

Given:

1. class Super {

2. private int a;

3. protected Super(int a) { this.a = a; }

4. } ...

11. class Sub extends Super {

12. public Sub(int a) { super(a); }

13. public Sub() { this.a = 5; }

14. }

Which two, independently, will allow Sub to compile? (Choose two.)

A. Change line 2 to:
public int a;
B. Change line 2 to:
protected int a;
C. Change line 13 to:
public Sub() { this(5); }
D. Change line 13 to:
public Sub() { super(5); }
E. Change line 13 to:
public Sub() { super(a); }

Answer: C,D

Explanation:

QUESTION NO: 38

Given:

1. public class Base {

2. public static final String FOO = "foo";

3. public static void main(String[] args) {

4. Base b = new Base();

5. Sub s = new Sub();

6. System.out.print(Base.FOO);

7. System.out.print(Sub.FOO);

8. System.out.print(b.FOO);

9. System.out.print(s.FOO);

10. System.out.print(((Base)s).FOO);

11. } }

12. class Sub extends Base {public static final String FOO="bar";}

What is the result?

A. foofoofoofoofoo
B. foobarfoobarbar
C. foobarfoofoofoo
D. foobarfoobarfoo
E. barbarbarbarbar
F. foofoofoobarbar
G. foofoofoobarfoo

Answer: D
Explanation:

QUESTION NO: 39

Given:

1. package geometry;

2. public class Hypotenuse {

3. public InnerTriangle it = new InnerTriangle();

4. class InnerTriangle {

5. public int base;

6. public int height;

7. }

8. }

Which statement is true about the class of an object that can reference the variable base?

A. It can be any class.
B. No class has access to base.
C. The class must belong to the geometry package.
D. The class must be a subclass of the class Hypotenuse.

Answer: C
Explanation:

QUESTION NO: 40

Given:

2. public class Hi {

3. void m1() { }

4. protected void() m2 { }

5. }

6. class Lois extends Hi {

7. // insert code here

8. }

Which four code fragments, inserted independently at line 7, will compile? (Choose four.)

A. public void m1() { }
B. protected void m1() { }
C. private void m1() { }
D. void m2() { }
E. public void m2() { }
F. protected void m2() { }
G. private void m2() { }

Answer: A,B,E,F
Explanation:

QUESTION NO: 41

Which two code fragments are most likely to cause a StackOverflowError? (Choose two.)

A. int []x = {1,2,3,4,5};
for(int y = 0; y < 6; y++)
System.out.println(x[y]);
B. static int[] x = {7,6,5,4};
static { x[1] = 8;
x[4] = 3; }
C. for(int y = 10; y < 10; y++)
doStuff(y);
D. void doOne(int x) { doTwo(x); }
void doTwo(int y) { doThree(y); }
void doThree(int z) { doTwo(z); }
E. for(int x = 0; x < 1000000000; x++)
doStuff(x);

F. void counter(int i) { counter(++i); }

Answer: D,F
Explanation:

QUESTION NO: 42

Given:

11. class A {

12. public void process() { System.out.print("A,"); }

13. class B extends A {

14. public void process() throws IOException {

15. super.process();

16. System.out.print("B,");

17. throw new IOException();

18. }

19. public static void main(String[] args) {

20. try { new B().process(); }

21. catch (IOException e) { System.out.println("Exception"); }

22. }

What is the result?

A. Exception
B. A,B,Exception
C. Compilation fails because of an error in line 20.
D. Compilation fails because of an error in line 14.
E. A NullPointerException is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 43

Given:

11. public void go(int x) {

12. assert (x > 0);

13. switch(x) {

14. case 2: ;

15. default: assert false;

16. }

17. }

18. private void go2(int x) { assert (x < 0); }

Which statement is true?

A. All of the assert statements are used appropriately.
B. Only the assert statement on line 12 is used appropriately.
C. Only the assert statement on line 15 is used appropriately.
D. Only the assert statement on line 18 is used appropriately.
E. Only the assert statements on lines 12 and 15 are used appropriately.
F. Only the assert statements on lines 12 and 18 are used appropriately.
G. Only the assert statements on lines 15 and 18 are used appropriately.

Answer: G
Explanation:

QUESTION NO: 44

Given:

1. public class Breaker2 {

2. static String o = "";

3. public static void main(String[] args) {

4. z:

5. for(int x = 2; x < 7; x++) {

6. if(x==3) continue;

7. if(x==5) break z;

8. o = o + x;

9. }

10. System.out.println(o);

11. }

12. }

What is the result?

A. 2
B. 24
C. 234
D. 246
E. 2346
F. Compilation fails.

Answer: B
Explanation:

QUESTION NO: 45

Given:

11. public static void main(String[] args) {

12. String str = "null";

13. if (str == null) {

14. System.out.println("null");

15. } else (str.length() == 0) {

16. System.out.println("zero");

17. } else {

18. System.out.println("some");

19. }

20. }

What is the result?

A. null
B. zero
C. some
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 46

Given:

```
11. public class Test {
12. public static void main(String [] args) {
13. int x = 5;
14. boolean b1 = true;
15. boolean b2 = false;
16.
17. if ((x == 4) && !b2 )
18. System.out.print("1 ");
19. System.out.print("2 ");
20. if ((b2 = true) && b1 )
21. System.out.print("3 ");
22. }
23. }
```

What is the result?

A. 2
B. 3
C. 1 2
D. 2 3
E. 1 2 3
F. Compilation fails.
G. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 47

Given:

11. static void test() throws Error {

12. if (true) throw new AssertionError();

13. System.out.print("test ");

14. }

15. public static void main(String[] args) {

16. try { test(); }

17. catch (Exception ex) { System.out.print("exception "); }

18. System.out.print("end ");

19. }

What is the result?

A. end
B. Compilation fails.
C. exception end
D. exception test end
E. A Throwable is thrown by main.
F. An Exception is thrown by main.

Answer: E
Explanation:

QUESTION NO: 48

Given:

10. public class Foo {

11. static int[] a;

12. static { a[0]=2; }

13. public static void main(String[] args) {}

14. }

Which exception or error will be thrown when a programmer attempts to run this code?

A. java.lang.StackOverflowError
B. java.lang.IllegalStateException
C. java.lang.ExceptionInInitializerError
D. java.lang.ArrayIndexOutOfBoundsException

Answer: C
Explanation:

QUESTION NO: 49

Click the Exhibit button. Given:

25. try {

26. A a = new A();

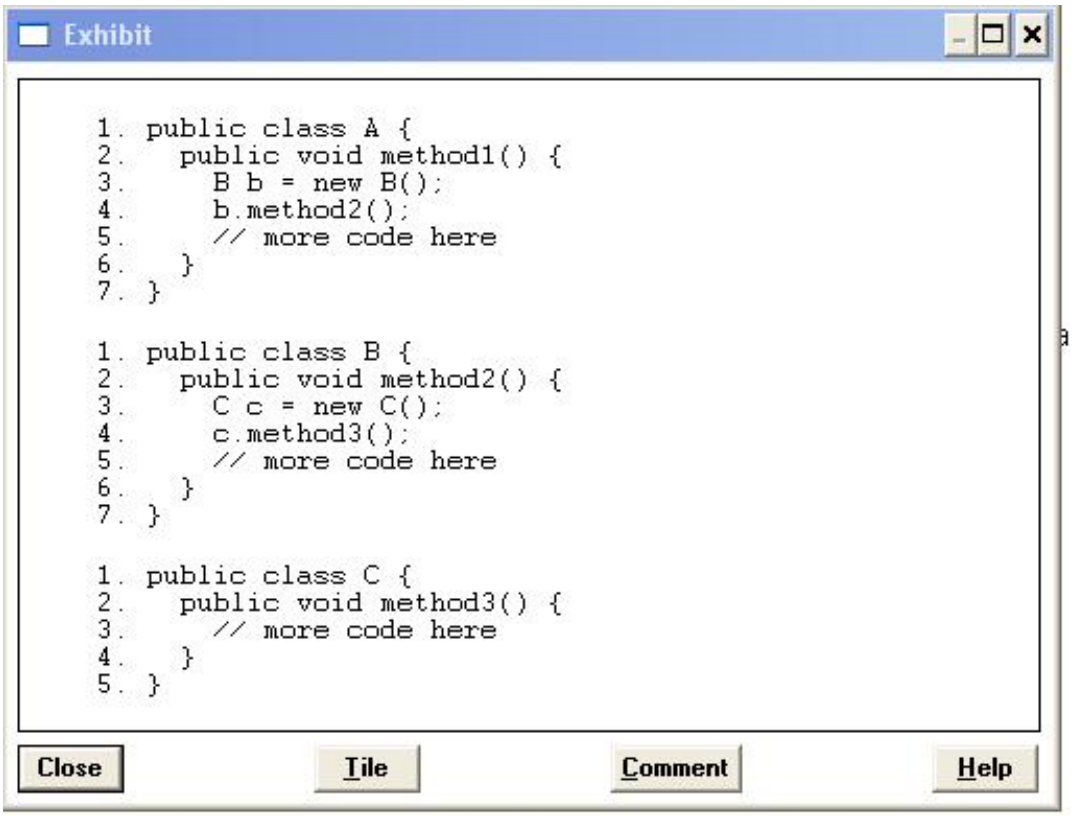
27. a.method1();

28. } catch (Exception e) {

29. System.out.print("an error occurred");

30. }

Which two statements are true if a NullPointerException is thrown on line 3 of class C? (Choose two.)



A. The application will crash.
B. The code on line 29 will be executed.
C. The code on line 5 of class A will execute.
D. The code on line 5 of class B will execute.
E. The exception will be propagated back to line 27.

Answer: B,E
Explanation:

QUESTION NO: 50

Given:

11. public static void main(String[] args) {

12. for (int i = 0; i <= 10; i++) {

13. if (i > 6) break;

14. }

15. System.out.println(i);

16. }

What is the result?

A. 6
B. 7
C. 10
D. 11
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: E
Explanation:

QUESTION NO: 51

Given:

11. static class A {

12. void process() throws Exception { throw new Exception(); }

13. }

14. static class B extends A {

15. void process() { System.out.println("B"); }

16. }

17. public static void main(String[] args) {

18. new B().process();

19. }

What is the result?

A. B
B. The code runs with no output.
C. Compilation fails because of an error in line 12.
D. Compilation fails because of an error in line 15.
E. Compilation fails because of an error in line 18.

Answer: A
Explanation:

QUESTION NO: 52

Given:

1. public class Threads5 {

2. public static void main (String[] args) {

3. new Thread(new Runnable() {

4. public void run() {

5. System.out.print("bar");

6. }}).start();

7. }

8. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "bar".
D. The code executes normally, but nothing prints.

Answer: C
Explanation:

QUESTION NO: 53

Given:

1. public class TestOne implements Runnable {

2. public static void main (String[] args) throws Exception {

3. Thread t = new Thread(new TestOne());

4. t.start();

5. System.out.print("Started");

6. t.join();

7. System.out.print("Complete");

8. }

9. public void run() {

10. for (int i = 0; i < 4; i++) {

11. System.out.print(i);

12. }

13. }

14. }

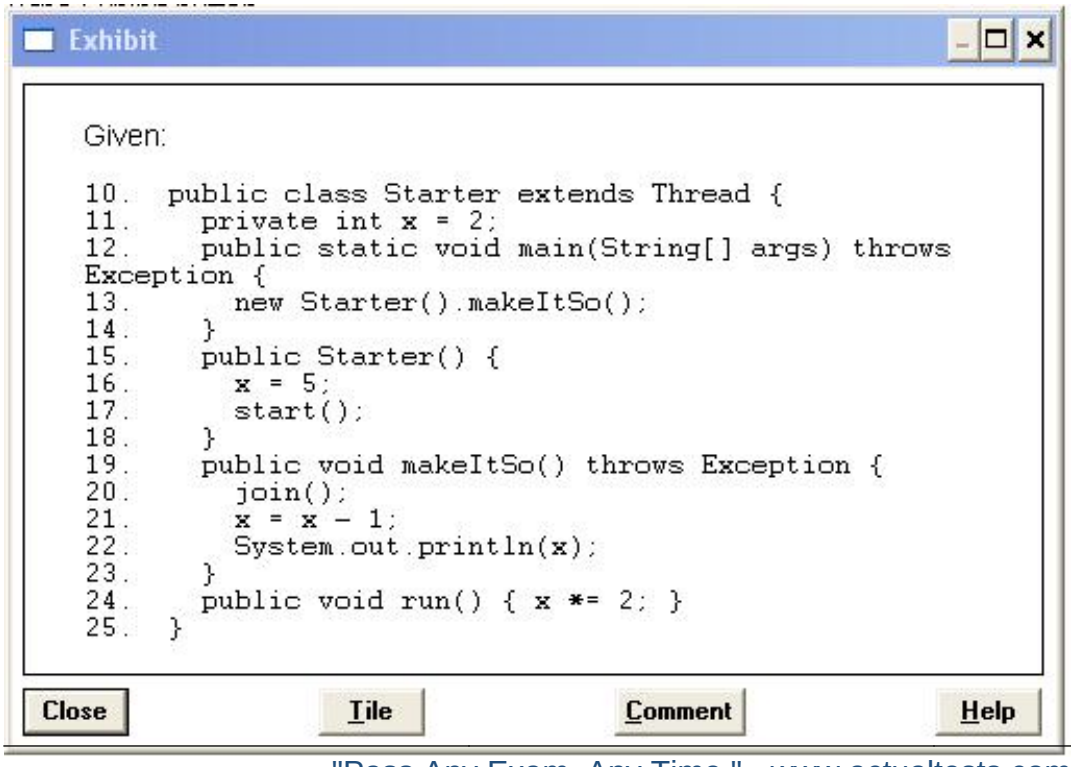
What can be a result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes and prints "StartedComplete".
D. The code executes and prints "StartedComplete0123".
E. The code executes and prints "Started0123Complete".

Answer: E
Explanation:

QUESTION NO: 54

Click the Exhibit button. What is the output if the main() method is run?



A. 4
B. 5
C. 8
D. 9
E. Compilation fails.
F. An exception is thrown at runtime.
G. It is impossible to determine for certain.

Answer: D
Explanation:

QUESTION NO: 55

Given:

1. public class TestFive {

2. private int x;

3. public void foo() {

4. int current = x;

5. x = current + 1;

6. }

7. public void go() {

8. for(int i = 0; i < 5; i++) {

9. new Thread() {

10. public void run() {

11. foo();

12. System.out.print(x + ", ");

13. } }.start();

14. } }

Which two changes, taken together, would guarantee the output: 1, 2, 3, 4, 5, ? (Choose two.)

A. move the line 12 print statement into the foo() method
B. change line 7 to public synchronized void go() {
C. change the variable declaration on line 2 to private volatile int x;

D. wrap the code inside the foo() method with a synchronized(this) block
E. wrap the for loop code inside the go() method with a synchronized block synchronized(this) { // for loop code here }

Answer: A,D
Explanation:

QUESTION NO: 56

Given:

1. public class Threads2 implements Runnable {

2.

3. public void run() {

4. System.out.println("run.");

5. throw new RuntimeException("Problem");

6. }

7. public static void main(String[] args) {

8. Thread t = new Thread(new Threads2());

9. t.start();

10. System.out.println("End of method.");

11. }

12. }

Which two can be results? (Choose two.)

A. java.lang.RuntimeException: Problem
B. run.
java.lang.RuntimeException: Problem
C. End of method.
java.lang.RuntimeException: Problem
D. End of method.
run.
java.lang.RuntimeException: Problem
E. run.
java.lang.RuntimeException: Problem

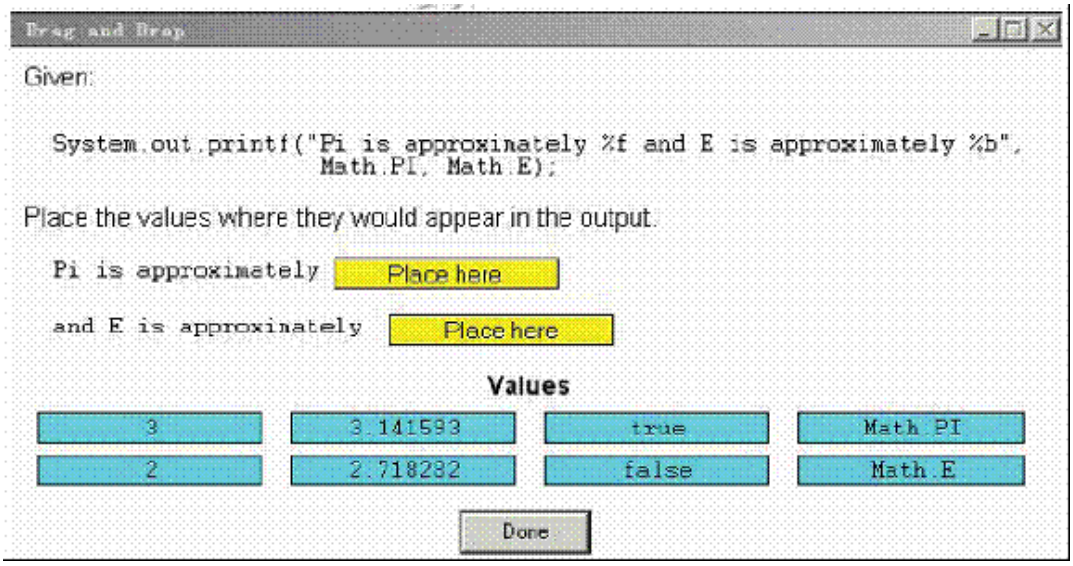
End of method.

Answer: D,E

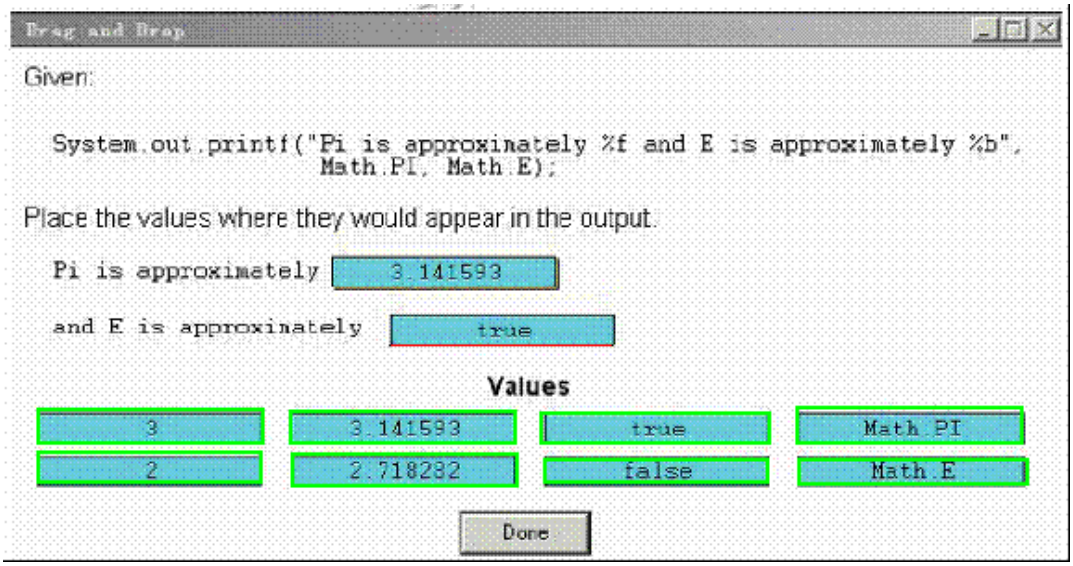
Explanation:

QUESTION NO: 57 DRAG DROP

Click the Task button.

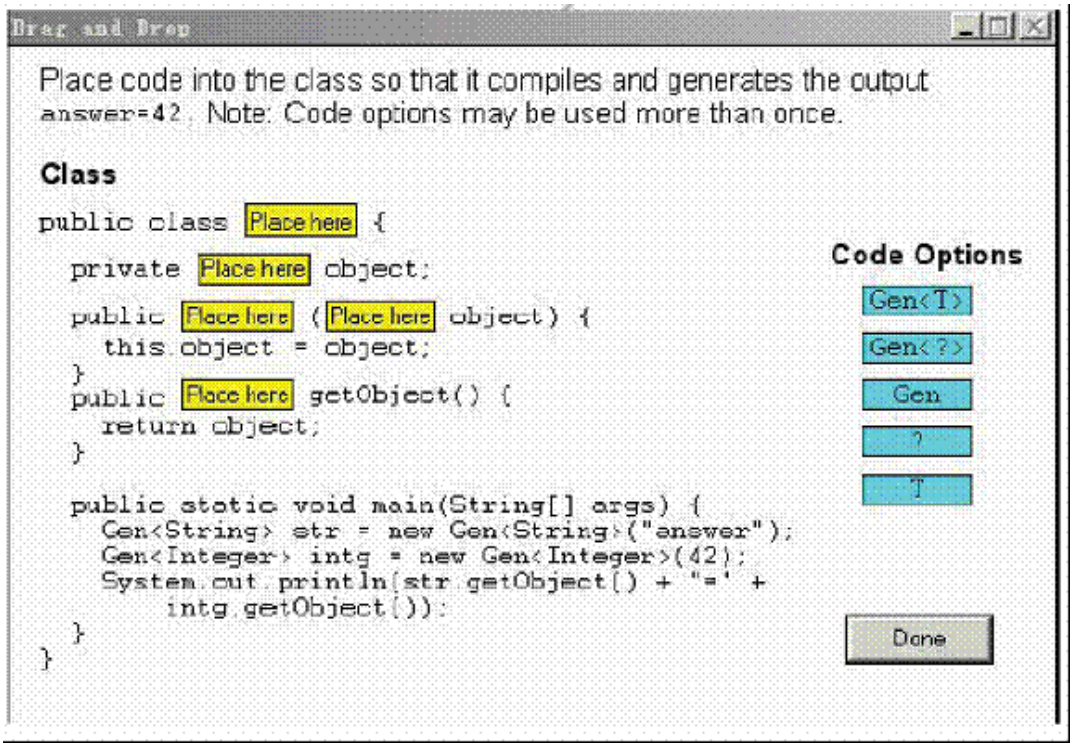


Answer:

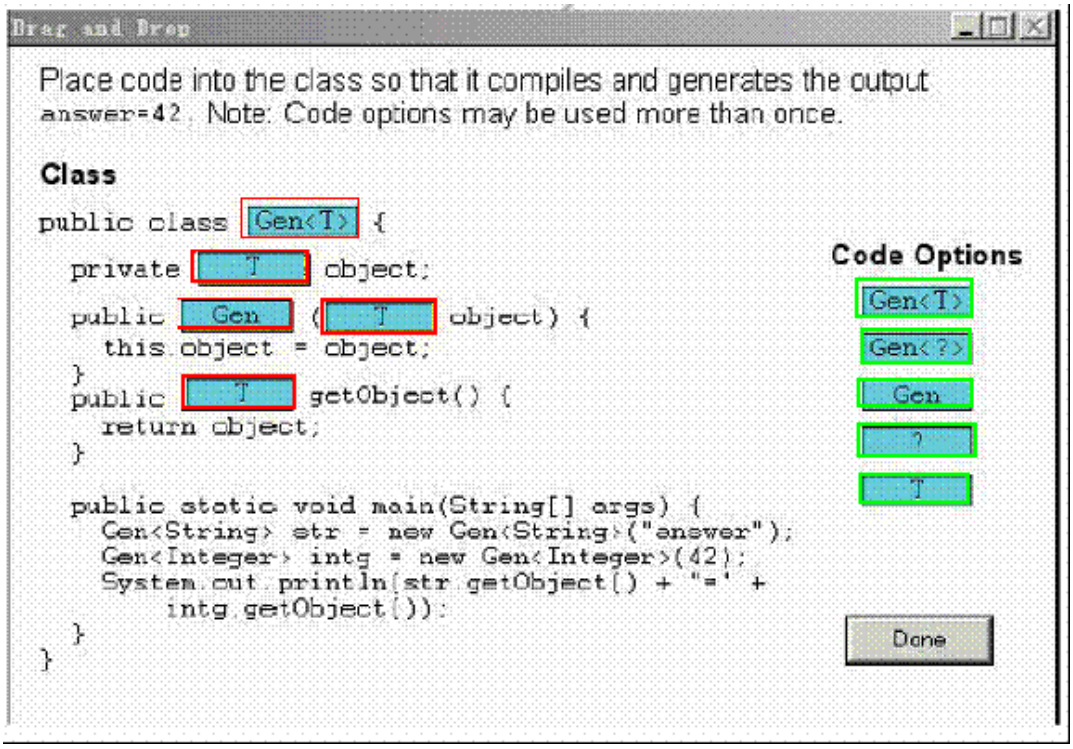


QUESTION NO: 58 DRAG DROP

Click the Task button.

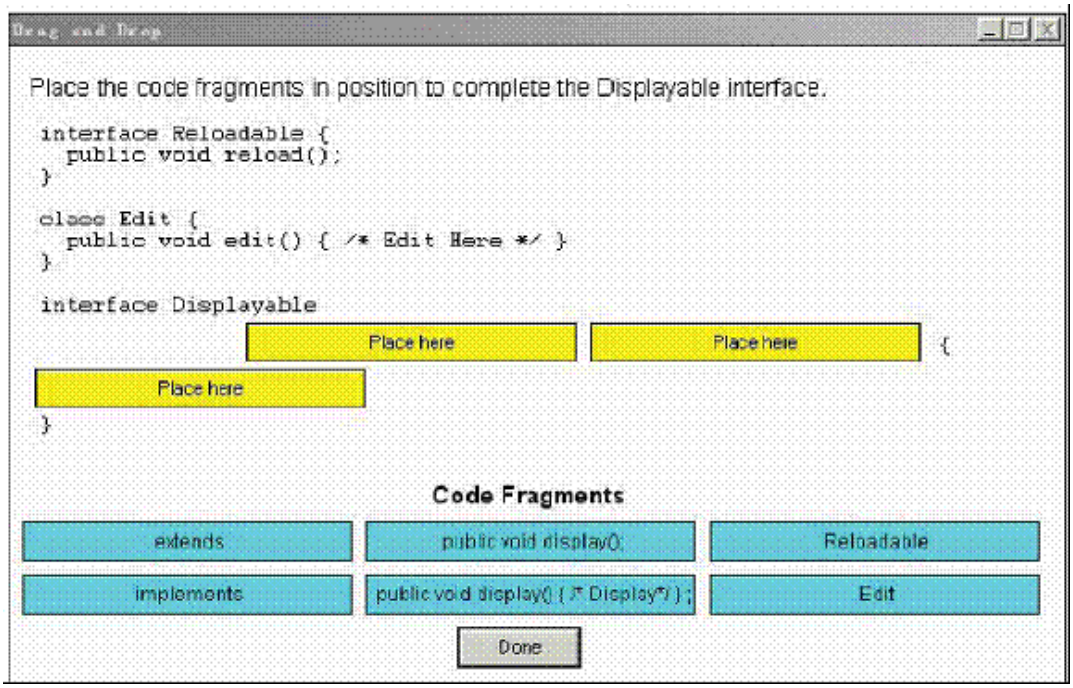


Answer:

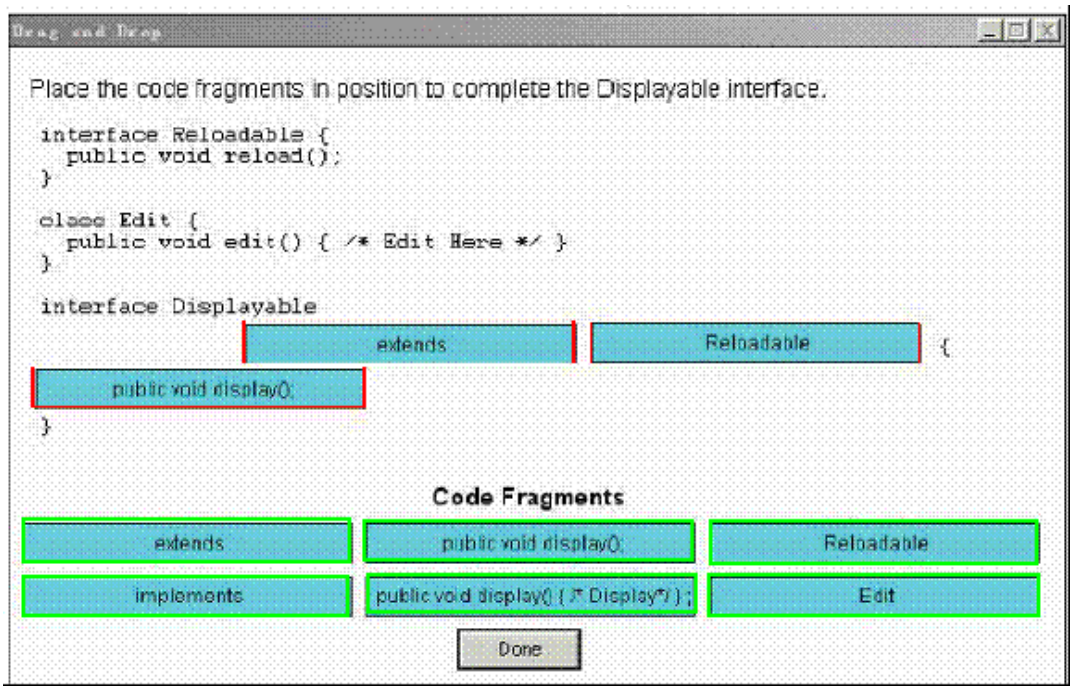


QUESTION NO: 59 DRAG DROP

Click the Task button.



Answer:



QUESTION NO: 60 DRAG DROP

Click the Task button.

The doesFileExist method takes an array of directory names representing a path from the root filesystem and a file name. The method returns true if the file exists, false if it does not.

Place the code fragments in position to complete this method.

```
public static boolean doesFileExist(String[] directories, String filename) {
    Place here
    for ( String dir : directories ) {
        Place here
    }
    Place here
    Place here
}
```

Code Fragments

path = path.getSubdirectory(dir);	return ! file.isNew();	return (file != null);
String path = "";	path = path.getFile(filename);	File path = new File("");
return file.exists();	return path.isFile();	File file = new File(path, filename);
path = new File(path, dir);	File path = new File(File.separator);	path = path + File.separator + dir;

Answer:

The doesFileExist method takes an array of directory names representing a path from the root filesystem and a file name. The method returns true if the file exists, false if it does not.

Place the code fragments in position to complete this method.

```
public static boolean doesFileExist(String[] directories, String filename) {
    String path = "";
    for ( String dir : directories ) {
        path = path + File.separator + dir;
    }
    File file = new File(path, filename);
    return file.exists();
}
```

Code Fragments

path = path.getSubdirectory(dir);	return ! file.isNew();	return (file != null);
String path = "";	path = path.getFile(filename);	File path = new File("");
return file.exists();	return path.isFile();	File file = new File(path, filename);
path = new File(path, dir);	File path = new File(File.separator);	path = path + File.separator + dir;

QUESTION NO: 61

Given:

1. public class TestString1 {

2. public static void main(String[] args) {

3. String str = "420";

4. str += 42;

5. System.out.print(str);

6. }

7. }

What is the output?

A. 42
B. 420
C. 462
D. 42042
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 62

Given:

12. Date date = new Date();

13. df.setLocale(Locale.ITALY);

14. String s = df.format(date);

The variable df is an object of type DateFormat that has been initialized in line 11. What is the result if this code is run on December 14, 2000?

A. The value of s is 14-dic-2000.
B. The value of s is Dec 14, 2000.
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 13.

Answer: D
Explanation:

QUESTION NO: 63

Given:

```
1. public class KungFu {
2. public static void main(String[] args) {
3. Integer x = 400;
4. Integer y = x;
5. x++;
6. StringBuilder sb1 = new StringBuilder("123");
7. StringBuilder sb2 = sb1;
8. sb1.append("5");
9. System.out.println((x==y) + " " + (sb1==sb2));
10. }
11. }
```

What is the result?

A. true true
B. false true
C. true false
D. false false
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 64

Given that the current directory is empty, and that the user has read and write privileges to the current directory, and the following:

```
1. import java.io.*;
2. public class Maker {
3. public static void main(String[] args) {
4. File dir = new File("dir");
5. File f = new File(dir, "f");
```

6. }

7. }

Which statement is true?

A. Compilation fails.
B. Nothing is added to the file system.
C. Only a new file is created on the file system.
D. Only a new directory is created on the file system.
E. Both a new file and a new directory are created on the file system.

Answer: B
Explanation:

QUESTION NO: 65

Given:

12. String csv = "Sue,5,true,3";

13. Scanner scanner = new Scanner(csv);

14. scanner.useDelimiter(",");

15. int age = scanner.nextInt();

What is the result?

A. Compilation fails.
B. After line 15, the value of age is 5.
C. After line 15, the value of age is 3.
D. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 66

Given that t1 is a reference to a live thread, which is true?

A. The Thread.sleep() method can take t1 as an argument.
B. The Object.notify() method can take t1 as an argument.

C. The Thread.yield() method can take t1 as an argument.
D. The Thread.setPriority() method can take t1 as an argument.
E. The Object.notify() method arbitrarily chooses which thread to notify.

Answer: E
Explanation:

QUESTION NO: 67

Given that Triangle implements Runnable, and:

31. void go() throws Exception {

32. Thread t = new Thread(new Triangle());

33. t.start();

34. for(int x = 1; x < 100000; x++) {

35. //insert code here

36. if(x%100 == 0) System.out.print("g");

37. } }

38. public void run() {

39. try {

40. for(int x = 1; x < 100000; x++) {

41. // insert the same code here

42. if(x%100 == 0) System.out.print("t");

43. }

44. } catch (Exception e) { }

45. }

Which two statements, inserted independently at both lines 35 and 41, tend to allow both threads to temporarily pause and allow the other thread to execute? (Choose two.)

A. Thread.wait();
B. Thread.join();
C. Thread.yield();
D. Thread.sleep(1);

E. Thread.notify();

Answer: C,D
Explanation:

QUESTION NO: 68

Given:

1. public class Threads3 implements Runnable {

2. public void run() {

3. System.out.print("running");

4. }

5. public static void main(String[] args) {

6. Thread t = new Thread(new Threads3());

7. t.run();

8. t.run();

9. t.start();

10. }

11. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes and prints "running".
D. The code executes and prints "runningrunning".
E. The code executes and prints "runningrunningrunning".

Answer: E
Explanation:

QUESTION NO: 69

Given:

```
1. public class Threads5 {
2. public static void main (String[] args) {
3. new Thread(new Runnable() {
4. public void run() {
5. System.out.print("bar");
6. }}).start();
7. }
8. }
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "bar".
D. The code executes normally, but nothing prints.

Answer: C
Explanation:

QUESTION NO: 70

Given:

```
11. public class PingPong implements Runnable {
12. synchronized void hit(long n) {
13. for(int i = 1; i < 3; i++)
14. System.out.print(n + "-" + i + " ");
15. }
16. public static void main(String[] args) {
17. new Thread(new PingPong()).start();
18. new Thread(new PingPong()).start();
19. }
20. public void run() {
```

21. hit(Thread.currentThread().getId());

22. }

23. }

Which two statements are true? (Choose two.)

A. The output could be 8-1 7-2 8-2 7-1
B. The output could be 7-1 7-2 8-1 6-1
C. The output could be 8-1 7-1 7-2 8-2
D. The output could be 8-1 8-2 7-1 7-2

Answer: C,D
Explanation:

QUESTION NO: 71

Given:

10. interface A { void x(); }

11. class B implements A { public void x() {} public void y() {} }

12. class C extends B { public void x() {} } And:

20. java.util.List<A> list = new java.util.ArrayList<A>();

21. list.add(new B());

22. list.add(new C());

23. for (A a : list) {

24. a.x();

25. a.y();

26. }

What is the result?

A. The code runs with no output.
B. An exception is thrown at runtime.
C. Compilation fails because of an error in line 20.
D. Compilation fails because of an error in line 21.
E. Compilation fails because of an error in line 23.

F. Compilation fails because of an error in line 25.

Answer: F
Explanation:

QUESTION NO: 72

Given:

11. class Mammal { }

12.

13. class Raccoon extends Mammal {

14. Mammal m = new Mammal();

15. }

16.

17. class BabyRaccoon extends Mammal { }

Which four statements are true? (Choose four.)

A. Raccoon is-a Mammal.
B. Raccoon has-a Mammal.
C. BabyRaccoon is-a Mammal.
D. BabyRaccoon is-a Raccoon.
E. BabyRaccoon has-a Mammal.
F. BabyRaccoon is-a BabyRaccoon.

Answer: A,B,C,F
Explanation:

QUESTION NO: 73

Given:

10: public class Hello {

11: String title;

12: int value;

13: public Hello() {

14: title += " World";

15: }

16: public Hello(int value) {

17: this.value = value;

18: title = "Hello";

19: Hello();

20: }

21: } and:

30: Hello c = new Hello(5);

31: System.out.println(c.title);

What is the result?

A. Hello
B. Hello World
C. Compilation fails.
D. Hello World 5
E. The code runs with no output.
F. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 74

Given:

1. class ClassA {

2. public int numberOfInstances;

3. protected ClassA(int numberOfInstances) {

4. this.numberOfInstances = numberOfInstances;

5. }

```
6. }
7. public class ExtendedA extends ClassA {
8. private ExtendedA(int numberOfInstances) {
9. super(numberOfInstances);
10. }
11. public static void main(String[] args) {
12. ExtendedA ext = new ExtendedA(420);
13. System.out.print(ext.numberOfInstances);
14. }
15. }
```

Which statement is true?

A. 420 is the output.
B. An exception is thrown at runtime.
C. All constructors must be declared public.
D. Constructors CANNOT use the private modifier.
E. Constructors CANNOT use the protected modifier.

Answer: A
Explanation:

QUESTION NO: 75

Given:

```
1. public class Target {
2. private int i = 0;
3. public int addOne(){
4. return ++i;
5. }
6. } And:
1. public class Client {
```

2. public static void main(String[] args){

3. System.out.println(new Target().addOne());

4. }

5. }

Which change can you make to Target without affecting Client?

A. Line 4 of class Target can be changed to return i++;
B. Line 2 of class Target can be changed to private int i = 1;
C. Line 3 of class Target can be changed to private int addOne(){
D. Line 2 of class Target can be changed to private Integer i = 0;

Answer: D
Explanation:

QUESTION NO: 76

Given:

1. public class Blip {

2. protected int blipvert(int x) { return 0; }

3. }

4. class Vert extends Blip {

5. // insert code here

6. }

Which five methods, inserted independently at line 5, will compile? (Choose five.)

A. public int blipvert(int x) { return 0; }
B. private int blipvert(int x) { return 0; }
C. private int blipvert(long x) { return 0; }
D. protected long blipvert(int x) { return 0; }
E. protected int blipvert(long x) { return 0; }
F. protected long blipvert(long x) { return 0; }
G. protected long blipvert(int x, int y) { return 0; }

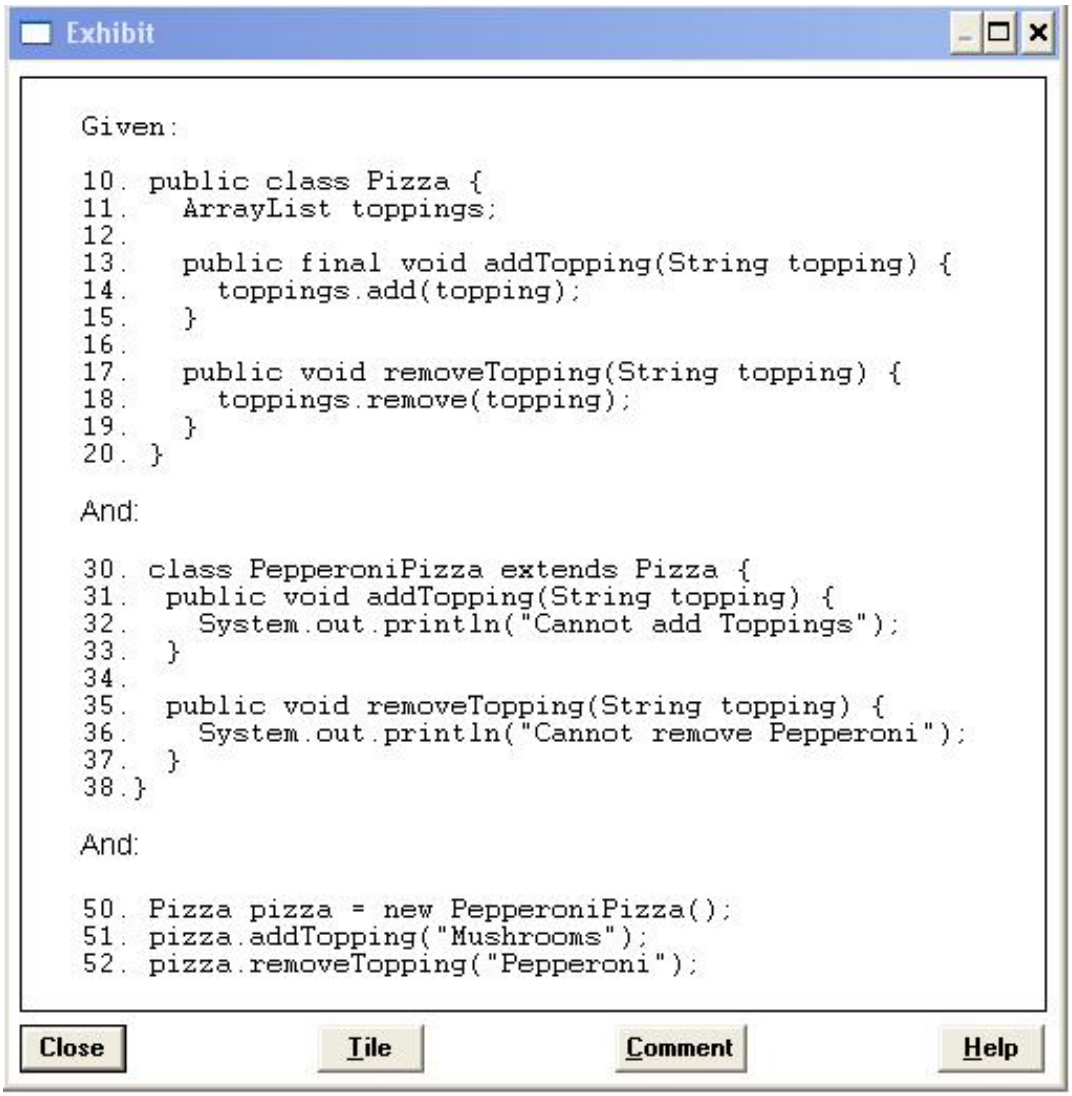
Answer: A,C,E,F,G
Explanation:

QUESTION NO: 77

Given:

```
1. class Pizza {
2. java.util.ArrayList toppings;
3. public final void addTopping(String topping) {
4. toppings.add(topping);
5. }
6. }
7. public class PepperoniPizza extends Pizza {
8. public void addTopping(String topping) {
9. System.out.println("Cannot add Toppings");
10. }
11. public static void main(String[] args) {
12. Pizza pizza = new PepperoniPizza();
13. pizza.addTopping("Mushrooms");
14. }
15. }
```

What is the result?



A. Compilation fails.
B. Cannot add Toppings
C. The code runs with no output.
D. A NullPointerException is thrown in Line 4.

Answer: A
Explanation:

QUESTION NO: 78

Given:

11. class ClassA {}

12. class ClassB extends ClassA {}

13. class ClassC extends ClassA {} and:

21. ClassA p0 = new ClassA();

22. ClassB p1 = new ClassB();

23. ClassC p2 = new ClassC();

24. ClassA p3 = new ClassB();

25. ClassA p4 = new ClassC();

Which three are valid? (Choose three.)

A. p0 = p1;
B. p1 = p2;
C. p2 = p4;
D. p2 = (ClassC)p1;
E. p1 = (ClassB)p3;
F. p2 = (ClassC)p4;

Answer: A,E,F
Explanation:

QUESTION NO: 79

Given two files, GrizzlyBear.java and Salmon.java:

1. package animals.mammals;

2.

3. public class GrizzlyBear extends Bear {

4. void hunt() {

5. Salmon s = findSalmon();

6. s.consume();

7. }

8. }

1. package animals.fish;

2.

3. public class Salmon extends Fish {

4. public void consume() { /* do stuff */ }

5. }

If both classes are in the correct directories for their packages, and the Mammal class correctly defines the findSalmon() method, which change allows this code to compile?

A. add import animals.mammals.*; at line 2 in Salmon.java
B. add import animals.fish.*; at line 2 in GrizzlyBear.java
C. add import animals.fish.Salmon.*; at line 2 in GrizzlyBear.java
D. add import animals.mammals.GrizzlyBear.*; at line 2 in Salmon.java

Answer: B
Explanation:

QUESTION NO: 80

Given:

1. package com.company.application;

2.

3. public class MainClass {

4. public static void main(String[] args) {}

5. }

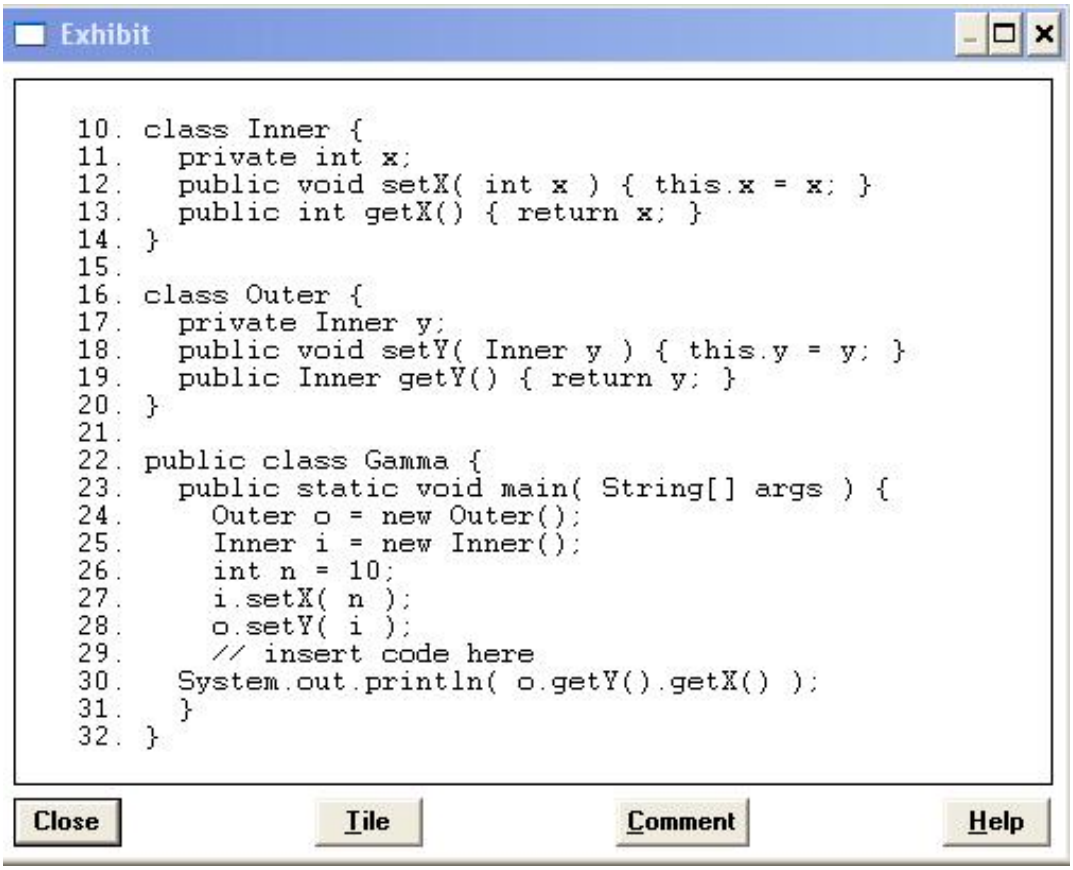
And MainClass exists in the /apps/com/company/application directory. Assume the CLASSPATH environment variable is set to "." (current directory). Which two java commands entered at the command line will run MainClass? (Choose two.)

A. java MainClass if run from the /apps directory
B. java com.company.application.MainClass if run from the /apps directory
C. java -classpath /apps com.company.application.MainClass if run from any directory
D. java -classpath . MainClass if run from the /apps/com/company/application directory
E. java -classpath /apps/com/company/application:. MainClass if run from the /apps directory
F. java com.company.application.MainClass if run from the /apps/com/company/application directory

Answer: B,C
Explanation:

QUESTION NO: 81

Click the Exhibit button. Which three code fragments, added individually at line 29, produce the output 100? (Choose three.)



A. n = 100;
B. i.setX(100);
C. o.getY().setX(100);
D. i = new Inner(); i.setX(100);
E. o.setY(i); i = new Inner(); i.setX(100);
F. i = new Inner(); i.setX(100); o.setY(i);

Answer: B,C,F

Explanation:

QUESTION NO: 82

A developer is creating a class Book, that needs to access class Paper. The Paper class is deployed in a JAR named myLib.jar. Which three, taken independently, will allow the developer to use the Paper class while compiling the Book class? (Choose three.)

A. The JAR file is located at $JAVA_HOME/jre/classes/myLib.jar.
B. The JAR file is located at $JAVA_HOME/jre/lib/ext/myLib.jar..

C. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar/Paper.class.
D. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar.
E. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -cp /foo/myLib.jar/Paper Book.java.
F. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -d /foo/myLib.jar Book.java
G. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -classpath /foo/myLib.jar Book.java

Answer: B,D,G
Explanation:

QUESTION NO: 83

Given:

11. interface DeclareStuff {

12. public static final int EASY = 3;

13. void doStuff(int t); }

14. public class TestDeclare implements DeclareStuff {

15. public static void main(String [] args) {

16. int x = 5;

17. new TestDeclare().doStuff(++x);

18. }

19. void doStuff(int s) {

20. s += EASY + ++s;

21. System.out.println("s " + s);

22. }

23. }

What is the result?

A. s 14
B. s 16

C. s 10
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 84

Given:

11. public class Commander {

12. public static void main(String[] args) {

13. String myProp = /* insert code here */

14. System.out.println(myProp);

15. }

16. }

and the command line: java -Dprop.custom=gobstopper Commander Which two, placed on line 13, will produce the output gobstopper? (Choose two.)

A. System.load("prop.custom");
B. System.getenv("prop.custom");
C. System.property("prop.custom");
D. System.getProperty("prop.custom");
E. System.getProperties().getProperty("prop.custom");

Answer: D,E
Explanation:

QUESTION NO: 85

Given:

3. public class Spock {

4. public static void main(String[] args) {

5. Long tail = 2000L;

6. Long distance = 1999L;

7. Long story = 1000L;

8. if((tail > distance) ^ ((story * 2) == tail))

9. System.out.print("1");

10. if((distance + 1 != tail) ^ ((story * 2) == distance))

11. System.out.print("2");

12. }

13. }

What is the result?

A. 1
B. 2
C. 12
D. Compilation fails.
E. No output is produced.
F. An exception is thrown at runtime.

Answer: E
Explanation:

QUESTION NO: 86

Given:

1. public class GC {

2. private Object o;

3. private void doSomethingElse(Object obj) { o = obj; }

4. public void doSomething() {

5. Object o = new Object();

6. doSomethingElse(o);

7. o = new Object();

8. doSomethingElse(null);

9. o = null;

10. }

11. }

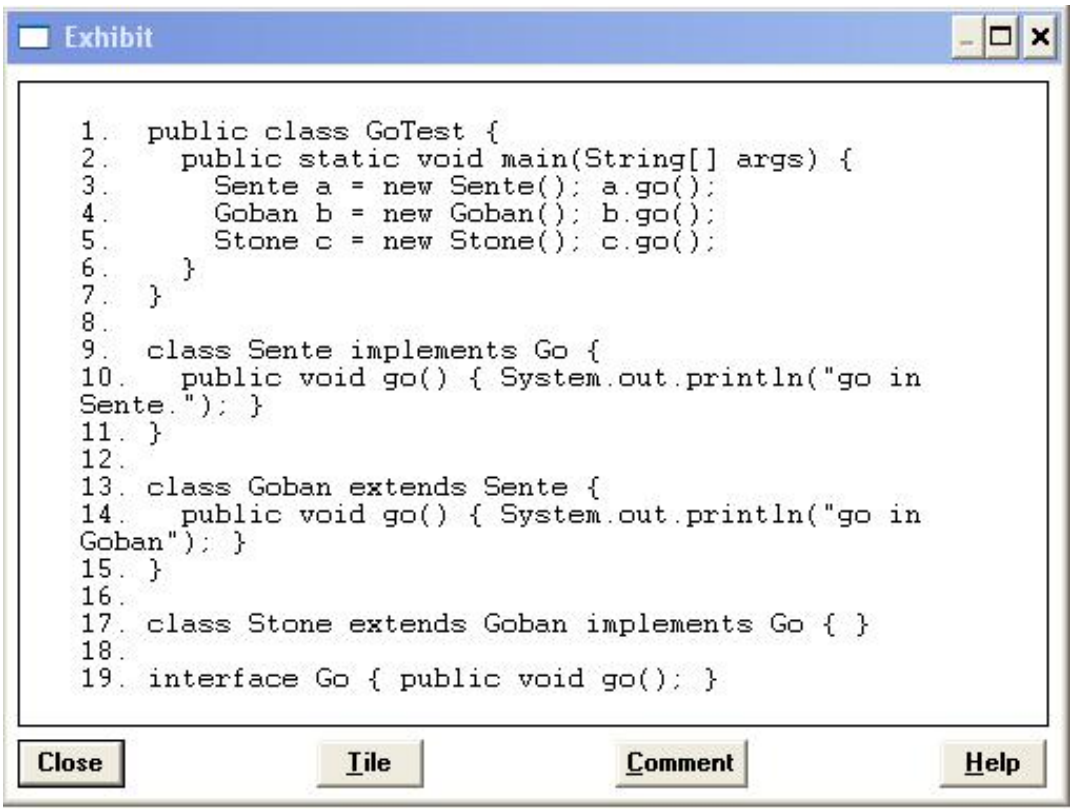
When the doSomething method is called, after which line does the Object created in line 5 become available for garbage collection?

A. Line 5
B. Line 6
C. Line 7
D. Line 8
E. Line 9
F. Line 10

Answer: D
Explanation:

QUESTION NO: 87

Click the Exhibit button. What is the result?



A. go in Goban

go in Sente
B. go in Sente
go in Goban
C. go in Sente
go in Goban
D. go in Goban
go in Sente
E. Compilation fails because of an error in line 17.

Answer: C

Explanation:

QUESTION NO: 88

Given:

1. public class Plant {

2. private String name;

3. public Plant(String name) { this.name = name; }

4. public String getName() { return name; }

5. }

1. public class Tree extends Plant {

2. public void growFruit() { }

3. public void dropLeaves() { }

4. }

Which statement is true?

A. The code will compile without changes.
B. The code will compile if public Tree() { Plant(); } is added to the Tree class.
C. The code will compile if public Plant() { Tree(); } is added to the Plant class.
D. The code will compile if public Plant() { this("fern"); } is added to the Plant class.
E. The code will compile if public Plant() { Plant("fern"); } is added to the Plant class.

Answer: D

Explanation:

QUESTION NO: 89

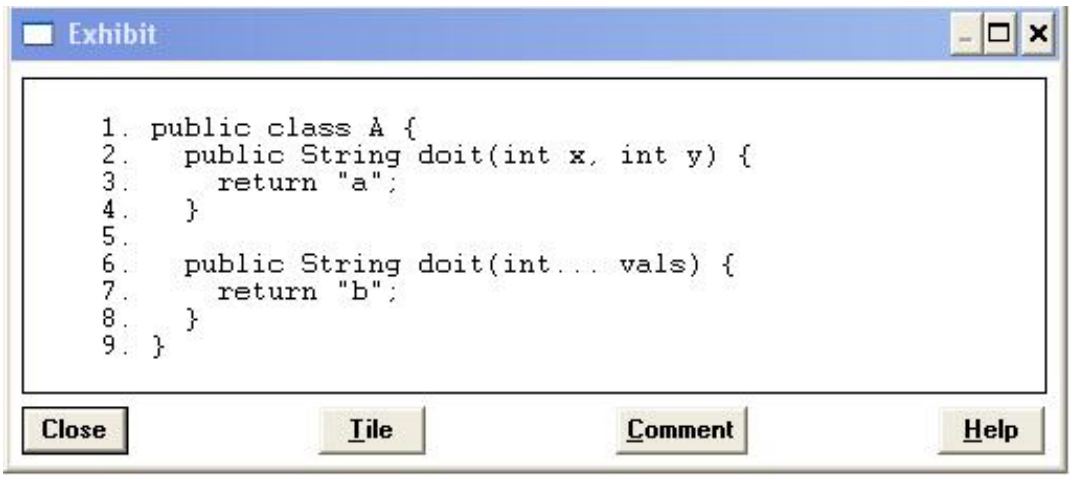
Click the Exhibit button.

Given:

25. A a = new A();

26. System.out.println(a.doit(4, 5));

What is the result?



A. Line 26 prints "a" to System.out.
B. Line 26 prints "b" to System.out.
C. An exception is thrown at line 26 at runtime.
D. Compilation of class A will fail due to an error in line 6.

Answer: A
Explanation:

QUESTION NO: 90

Given:

11. public enum Title {

12. MR("Mr."), MRS("Mrs."), MS("Ms.");

13. private final String title;

14. private Title(String t) { title = t; }

15. public String format(String last, String first) {

16. return title + " " + first + " " + last;

17. }

18. }

19. public static void main(String[] args) {

20. System.out.println(Title.MR.format("Doe", "John"));

21. }

What is the result?

A. Mr. John Doe
B. An exception is thrown at runtime.
C. Compilation fails because of an error in line 12.
D. Compilation fails because of an error in line 15.
E. Compilation fails because of an error in line 20.

Answer: A
Explanation:

QUESTION NO: 91

Given:

11. public interface A111 {

12. String s = "yo";

13. public void method1();

14. }

17. interface B { }

20. interface C extends A111, B {

21. public void method1();

22. public void method1(int x);

23. }

What is the result?

A. Compilation succeeds.

B. Compilation fails due to multiple errors.
C. Compilation fails due to an error only on line 20.
D. Compilation fails due to an error only on line 21.
E. Compilation fails due to an error only on line 22.
F. Compilation fails due to an error only on line 12.

Answer: A
Explanation:

QUESTION NO: 92

Given:

```
1. interface TestA { String toString(); }
2. public class Test {
3. public static void main(String[] args) {
4. System.out.println(new TestA() {
5. public String toString() { return "test"; }
6. });
7. }
8. }
```

What is the result?

A. test
B. null
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 1.
E. Compilation fails because of an error in line 4.
F. Compilation fails because of an error in line 5.

Answer: A
Explanation:

QUESTION NO: 93

Given:

```
11. class Alpha {
12. public void foo() { System.out.print("Afoo "); }
13. }
14. public class Beta extends Alpha {
15. public void foo() { System.out.print("Bfoo "); }
16. public static void main(String[] args) {
17. Alpha a = new Beta();
18. Beta b = (Beta)a;
19. a.foo();
20. b.foo();
21. }
22. }
```

What is the result?

A. Afoo Afoo
B. Afoo Bfoo
C. Bfoo Afoo
D. Bfoo Bfoo
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 94

Given:

```
10. abstract public class Employee {
11. protected abstract double getSalesAmount();
12. public double getCommision() {
13. return getSalesAmount() * 0.15;
```

14. }

15. }

16. class Sales extends Employee {

17. // insert method here

18. }

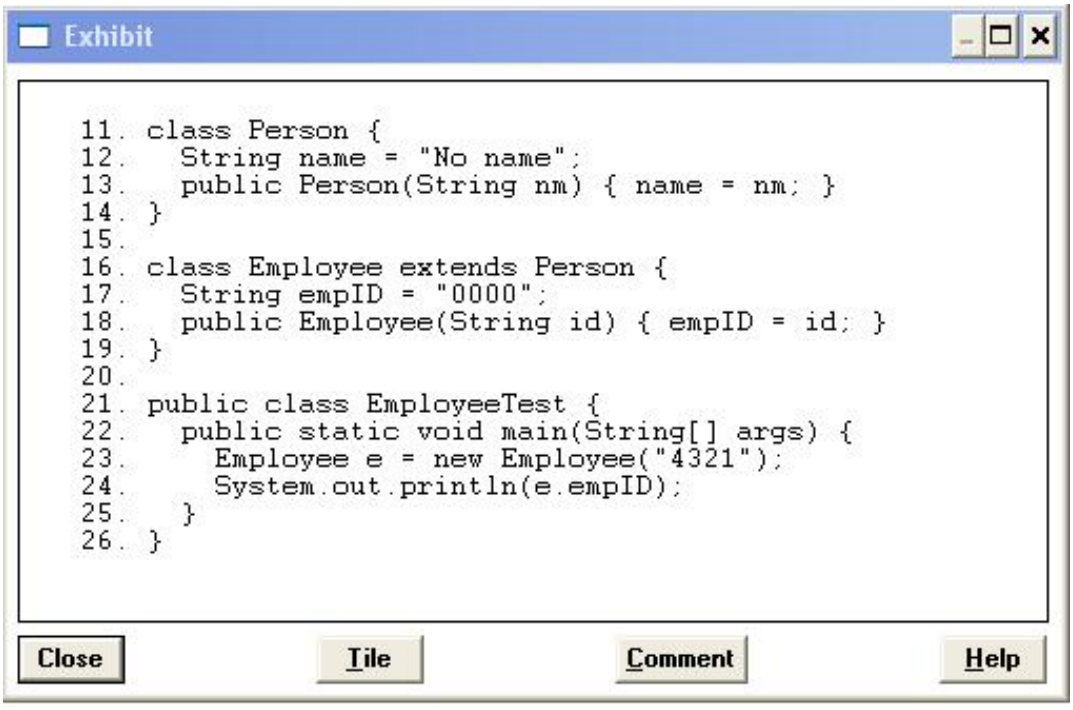
Which two methods, inserted independently at line 17, correctly complete the Sales class? (Choose two.)

A. double getSalesAmount() { return 1230.45; }
B. public double getSalesAmount() { return 1230.45; }
C. private double getSalesAmount() { return 1230.45; }
D. protected double getSalesAmount() { return 1230.45; }

Answer: B,D
Explanation:

QUESTION NO: 95

Click the Exhibit button. What is the result?



A. 4321
B. 0000

C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 18.

Answer: D
Explanation:

QUESTION NO: 96

Given:

3. import java.util.*;

4. public class Mapit {

5. public static void main(String[] args) {

6. Set<Integer> set = new HashSet<Integer>();

7. Integer i1 = 45;

8. Integer i2 = 46;

9. set.add(i1);

10. set.add(i1);

11. set.add(i2); System.out.print(set.size() + " ");

12. set.remove(i1); System.out.print(set.size() + " ");

13. i2 = 47;

14. set.remove(i2); System.out.print(set.size() + " ");

15. }

16. }

What is the result?

A. 2 1 0
B. 2 1 1
C. 3 2 1
D. 3 2 2
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: B

Explanation:

QUESTION NO: 97

Given:

1. public class Score implements Comparable<Score> {

2. private int wins, losses;

3. public Score(int w, int l) { wins = w; losses = l; }

4. public int getWins() { return wins; }

5. public int getLosses() { return losses; }

6. public String toString() {

7. return "<" + wins + "," + losses + ">";

8. }

9. // insert code here

10. }

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*/}

Answer: B
Explanation:

QUESTION NO: 98

A programmer has an algorithm that requires a java.util.List that provides an efficient implementation of add(0, object), but does NOT need to support quick random access. What supports these requirements?

A. java.util.Queue
B. java.util.ArrayList

C. java.util.LinearList
D. java.util.LinkedList

Answer: D
Explanation:

QUESTION NO: 99

Given:

```
12. import java.util.*;
13. public class Explorer3 {
14. public static void main(String[] args) {
15. TreeSet<Integer> s = new TreeSet<Integer>();
16. TreeSet<Integer> subs = new TreeSet<Integer>();
17. for(int i = 606; i < 613; i++)
18. if(i%2 == 0) s.add(i);
19. subs = (TreeSet)s.subSet(608, true, 611, true);
20. subs.add(629);
21. System.out.println(s + " " + subs);
22. }
23. }
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. [608, 610, 612, 629] [608, 610]
D. [608, 610, 612, 629] [608, 610, 629]
E. [606, 608, 610, 612, 629] [608, 610]
F. [606, 608, 610, 612, 629] [608, 610, 629]

Answer: F
Explanation:

QUESTION NO: 100

Given:

11. // insert code here

12. private N min, max;

13. public N getMin() { return min; }

14. public N getMax() { return max; }

15. public void add(N added) {

16. if (min == null || added.doubleValue() < min.doubleValue())

17. min = added;

18. if (max == null || added.doubleValue() > max.doubleValue()) 19. max = added;

20. }

21. }

Which two, inserted at line 11, will allow the code to compile? (Choose two.)

A. public class MinMax<?> {
B. public class MinMax<? extends Number> {
C. public class MinMax<N extends Object> {
D. public class MinMax<N extends Number> {
E. public class MinMax<? extends Object> {
F. public class MinMax<N extends Integer> {

Answer: D,F

QUESTION NO: 101

Given:

12. import java.util.*;

13. public class Explorer1 {

14. public static void main(String[] args) {

15. TreeSet<Integer> s = new TreeSet<Integer>();

16. TreeSet<Integer> subs = new TreeSet<Integer>();

17. for(int i = 606; i < 613; i++)

18. if(i%2 == 0) s.add(i);

19. subs = (TreeSet)s.subSet(608, true, 611, true);

20. s.add(609);

21. System.out.println(s + " " + subs);

22. }

23. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. [608, 609, 610, 612] [608, 610]
D. [608, 609, 610, 612] [608, 609, 610]
E. [606, 608, 609, 610, 612] [608, 610]
F. [606, 608, 609, 610, 612] [608, 609, 610]

Answer: F
Explanation:

QUESTION NO: 102

Given:

23. Object [] myObjects = {

24. new Integer(12),

25. new String("foo"),

26. new Integer(5),

27. new Boolean(true)

28. };

29. Arrays.sort(myObjects);

30. for(int i=0; i<myObjects.length; i++) {

31. System.out.print(myObjects[i].toString());

32. System.out.print(" ");

33. }

What is the result?

A. Compilation fails due to an error in line 23.
B. Compilation fails due to an error in line 29.
C. A ClassCastException occurs in line 29.
D. A ClassCastException occurs in line 31.
E. The value of all four objects prints in natural order.

Answer: C
Explanation:

QUESTION NO: 103

Given:

1. public class Donkey {

2. public static void main(String[] args) {

3. boolean assertsOn = false;

4. assert (assertsOn) : assertsOn = true;

5. if(assertsOn) {

6. System.out.println("assert is on");

7. }

8. }

9. }

If class Donkey is invoked twice, the first time without assertions enabled, and the second time with assertions enabled, what are the results?

A. no output
B. no output
assert is on
C. assert is on
D. no output
An AssertionError is thrown.
E. assert is on

An AssertionError is thrown.

Answer: D
Explanation:

QUESTION NO: 104

Given:

11. Float pi = new Float(3.14f);

12. if (pi > 3) {

13. System.out.print("pi is bigger than 3. ");

14. }

15. else {

16. System.out.print("pi is not bigger than 3. ");

17. }

18. finally {

19. System.out.println("Have a nice day.");

20. }

What is the result?

A. Compilation fails.
B. pi is bigger than 3.
C. An exception occurs at runtime.
D. pi is bigger than 3. Have a nice day.
E. pi is not bigger than 3. Have a nice day.

Answer: A
Explanation:

QUESTION NO: 105

Given:

11. public static void main(String[] args) {

```
12. try {
13. args = null;
14. args[0] = "test";
15. System.out.println(args[0]);
16. } catch (Exception ex) {
17. System.out.println("Exception");
18. } catch (NullPointerException npe) {
19. System.out.println("NullPointerException");
20. }
21. }
```

What is the result?

A. test
B. Exception
C. Compilation fails.
D. NullPointerException

Answer: C
Explanation:

QUESTION NO: 106

Given:

```
22. public void go() {
23. String o = "";
24. z:
25. for(int x = 0; x < 3; x++) {
26. for(int y = 0; y < 2; y++) {
27. if(x==1) break;
28. if(x==2 && y==1) break z;
29. o = o + x + y;
```

30. }

31. }

32. System.out.println(o);

33. }

What is the result when the go() method is invoked?

A. 00
B. 0001
C. 000120
D. 00012021
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 107

Given:

12. public class Test {

13. public enum Dogs {collie, harrier};

14. public static void main(String [] args) {

15. Dogs myDog = Dogs.collie;

16. switch (myDog) {

17. case collie:

18. System.out.print("collie ");

19. case harrier:

20. System.out.print("harrier ");

21. }

22. }

23. }

What is the result?

A. collie
B. harrier
C. Compilation fails.
D. collie harrier
E. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 108

Click the Exhibit button. Given:

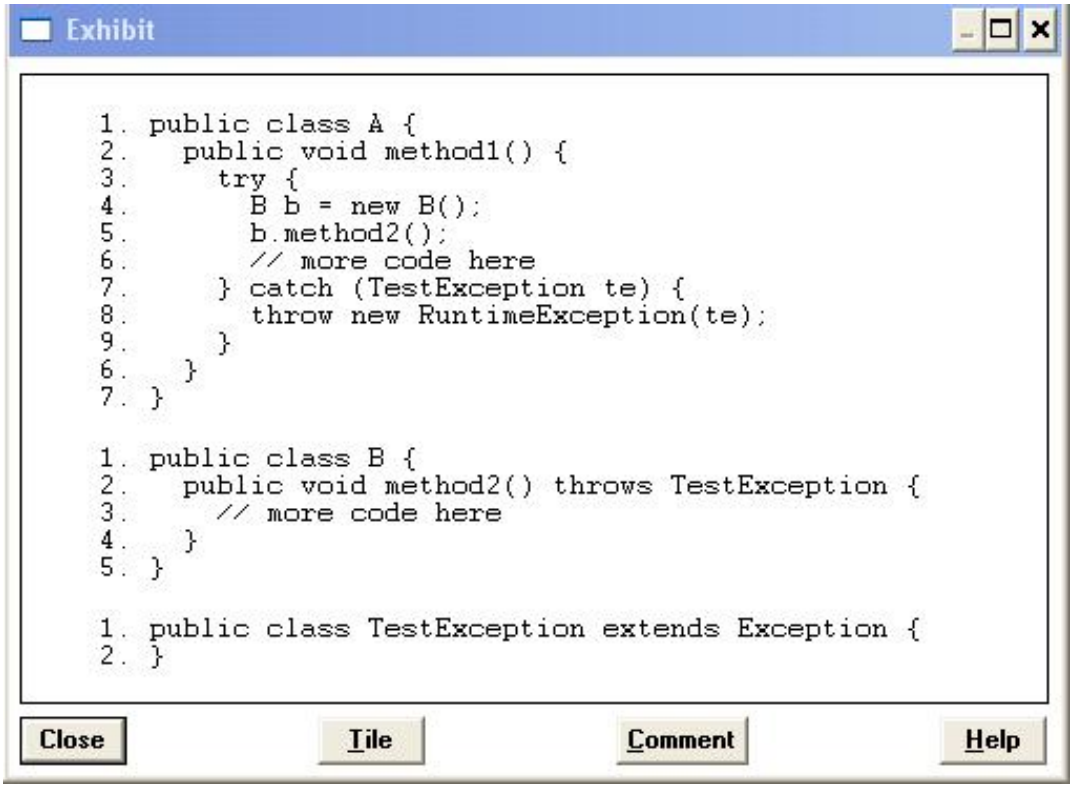
31. public void method() {

32. A a = new A();

33. a.method1();

34. }

Which statement is true if a TestException is thrown on line 3 of class B?



A. Line 33 must be called within a try block.
B. The exception thrown by method1 in class A is not required to be caught.
C. The method declared on line 31 must be declared to throw a RuntimeException.
D. On line 5 of class A, the call to method2 of class B does not need to be placed in a try/catch block.

Answer: B
Explanation:

QUESTION NO: 109

Given:

1. public class Boxer1{

2. Integer i;

3. int x;

4. public Boxer1(int y) {

5. x = i+y;

6. System.out.println(x);

7. }

8. public static void main(String[] args) {

9. new Boxer1(new Integer(4));

10. }

11. }

What is the result?

A. The value "4" is printed at the command line.
B. Compilation fails because of an error in line 5.
C. Compilation fails because of an error in line 9.
D. A NullPointerException occurs at runtime.
E. A NumberFormatException occurs at runtime.
F. An IllegalStateException occurs at runtime.

Answer: D
Explanation:

QUESTION NO: 110

Given:

11. static class A {

12. void process() throws Exception { throw new Exception(); }

13. }

14. static class B extends A {

15. void process() { System.out.println("B"); }

16. }

17. public static void main(String[] args) {

18. new B().process();

19. }

What is the result?

A. B
B. The code runs with no output.
C. Compilation fails because of an error in line 12.
D. Compilation fails because of an error in line 15.
E. Compilation fails because of an error in line 18.

Answer: A
Explanation:

QUESTION NO: 111

Given:

1. public class Venus {

2. public static void main(String[] args) {

3. int [] x = {1,2,3};

4. int y[] = {4,5,6};

5. new Venus().go(x,y);

6. }

7. void go(int[]... z) {

8. for(int[] a : z)

9. System.out.print(a[0]);

10. }

11. }

What is the result?

A. 1
B. 12
C. 14
D. 123
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 112

Given:

10. public class Foo {

11. static int[] a;

12. static { a[0]=2; }

13. public static void main(String[] args) {}

14. }

Which exception or error will be thrown when a programmer attempts to run this code?

A. java.lang.StackOverflowError
B. java.lang.IllegalStateException
C. java.lang.ExceptionInInitializerError
D. java.lang.ArrayIndexOutOfBoundsException

Answer: C
Explanation:

QUESTION NO: 113

Given:

```
11. class X { public void foo() { System.out.print("X "); } }
12.
13. public class SubB extends X {
14. public void foo() throws RuntimeException {
15. super.foo();
16. if (true) throw new RuntimeException();
17. System.out.print("B ");
18. }
19. public static void main(String[] args) {
20. new SubB().foo();
21. }
22. }
```

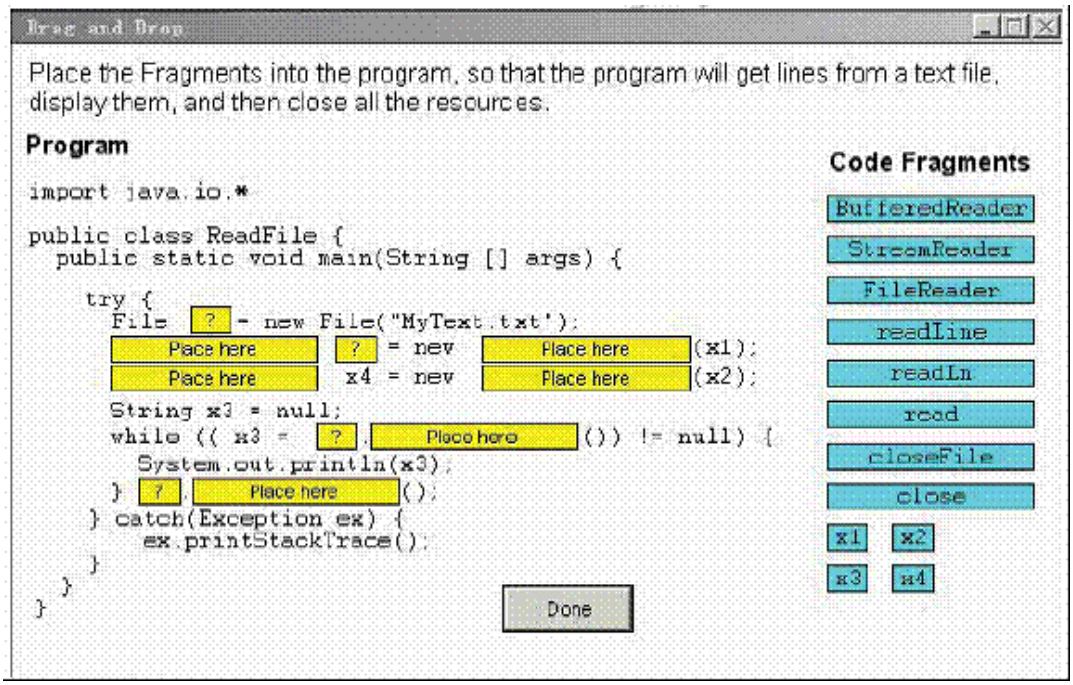
What is the result?

A. X, followed by an Exception.
B. No output, and an Exception is thrown.
C. Compilation fails due to an error on line 14.
D. Compilation fails due to an error on line 16.
E. Compilation fails due to an error on line 17.
F. X, followed by an Exception, followed by B.

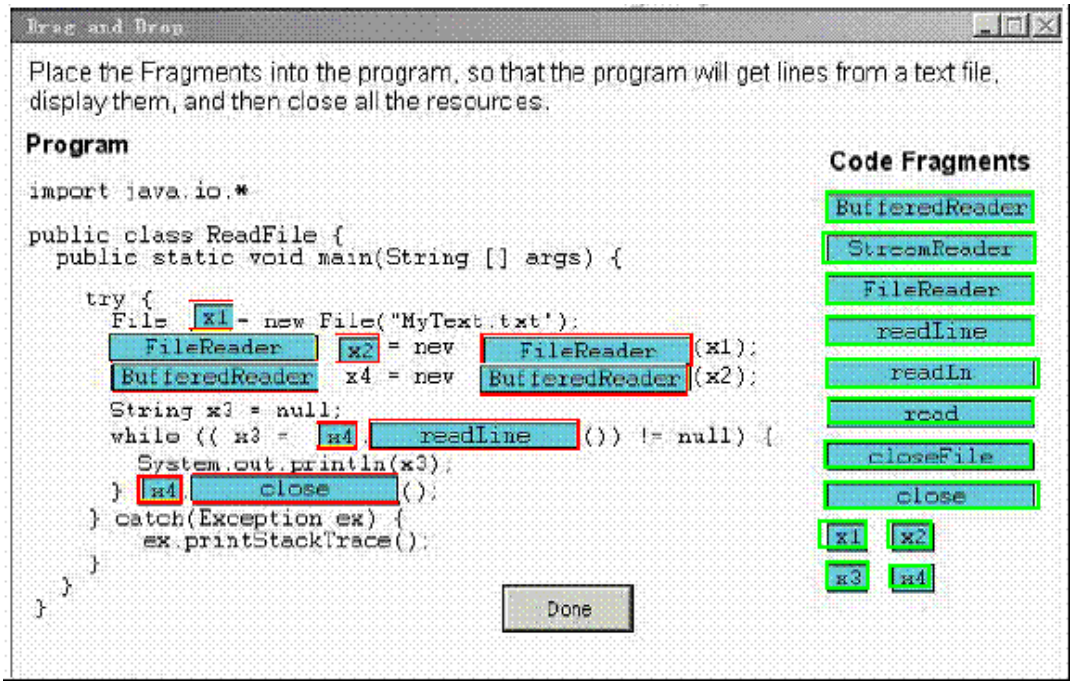
Answer: A
Explanation:

QUESTION NO: 114 DRAG DROP

Click the Task button.



Answer:



QUESTION NO: 115 DRAG DROP

Click the Task button.

Given:
```
public class Doubler {
  public static int doubleMe( Holder h) {
    return h.getAmount() * 2;
  }
}
```
and:
```
public class Holder {
  int amount = 10;
  public void doubleAmount(){ amount = Doubler.doubleMe( this );}
  public int getAmount(){ return amount;}
  //more code here
}
```
Place the code fragments in position to reduce the coupling between Doubler and Holder.

```
public class Doubler {
  public static int doubleMe( [Place here]  h) {
    return [Place here] * 2;
  }
}

public class Holder {
  int amount = 10;
  public void doubleAmount(){ amount = Doubler.doubleMe( [Place here] );}
  public int getAmount(){ return amount;}
  //more code here
}
```

Code Fragments

void	Holder	int	Doubler
h.getAmount()	h	this	amount

Done

Answer:

Given:
```
public class Doubler {
  public static int doubleMe( Holder h) {
    return h.getAmount() * 2;
  }
}
```
and:
```
public class Holder {
  int amount = 10;
  public void doubleAmount(){ amount = Doubler.doubleMe( this );}
  public int getAmount(){ return amount;}
  //more code here
}
```
Place the code fragments in position to reduce the coupling between Doubler and Holder.

```
public class Doubler {
  public static int doubleMe( [void]  h) {
    return [h] * 2;
  }
}

public class Holder {
  int amount = 10;
  public void doubleAmount(){ amount = Doubler.doubleMe( [h.getAmount()] );}
  public int getAmount(){ return amount;}
  //more code here
}
```

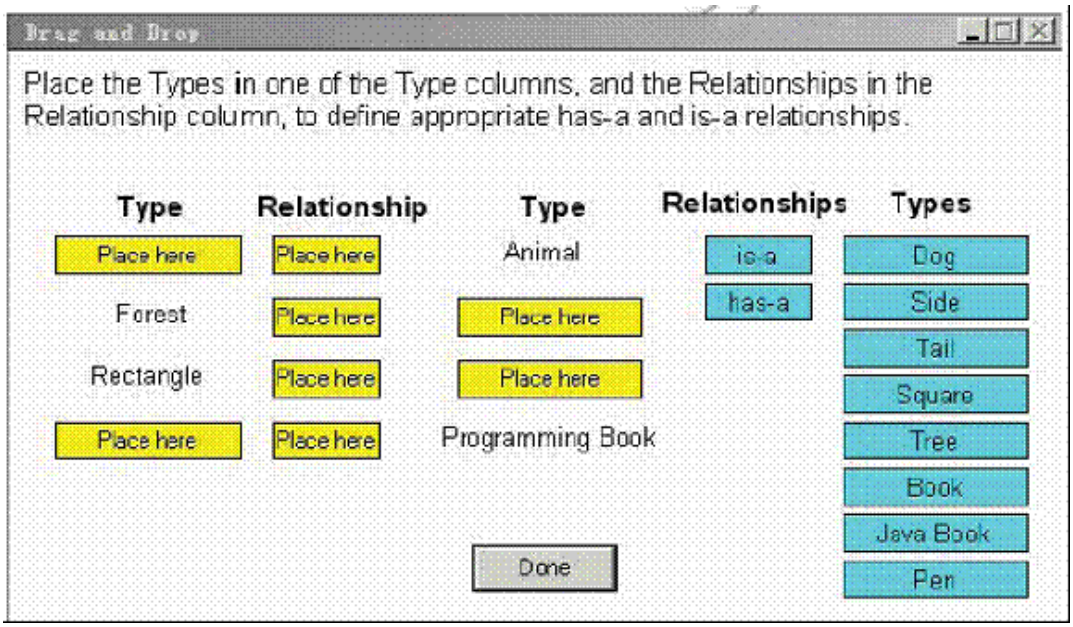
Code Fragments

void	Holder	int	Doubler
h.getAmount()	h	this	amount

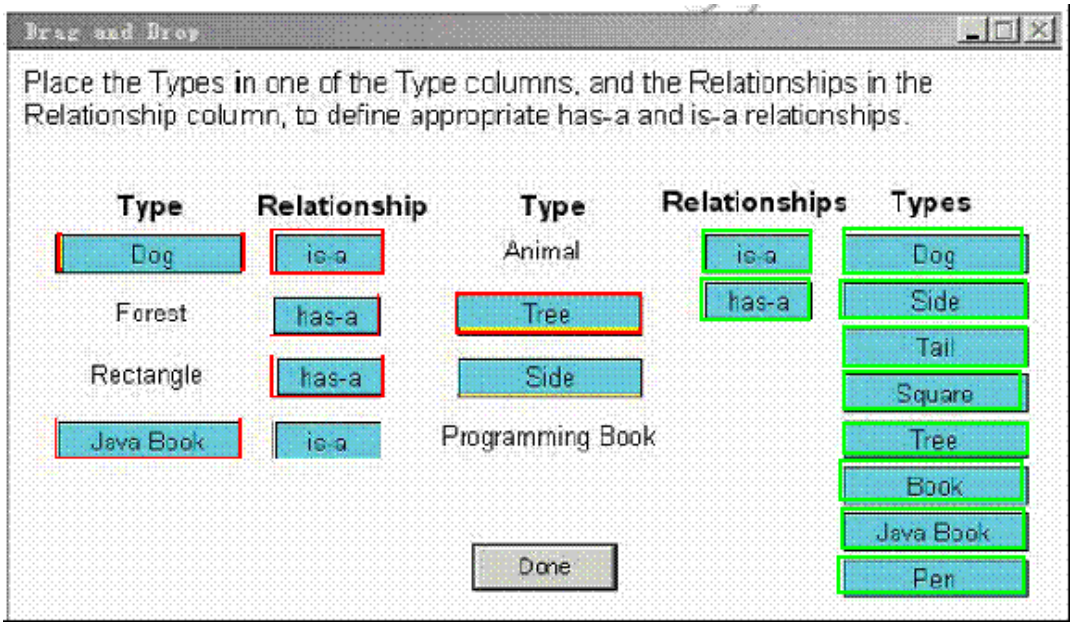
Done

QUESTION NO: 116 DRAG DROP

Click the Task button.

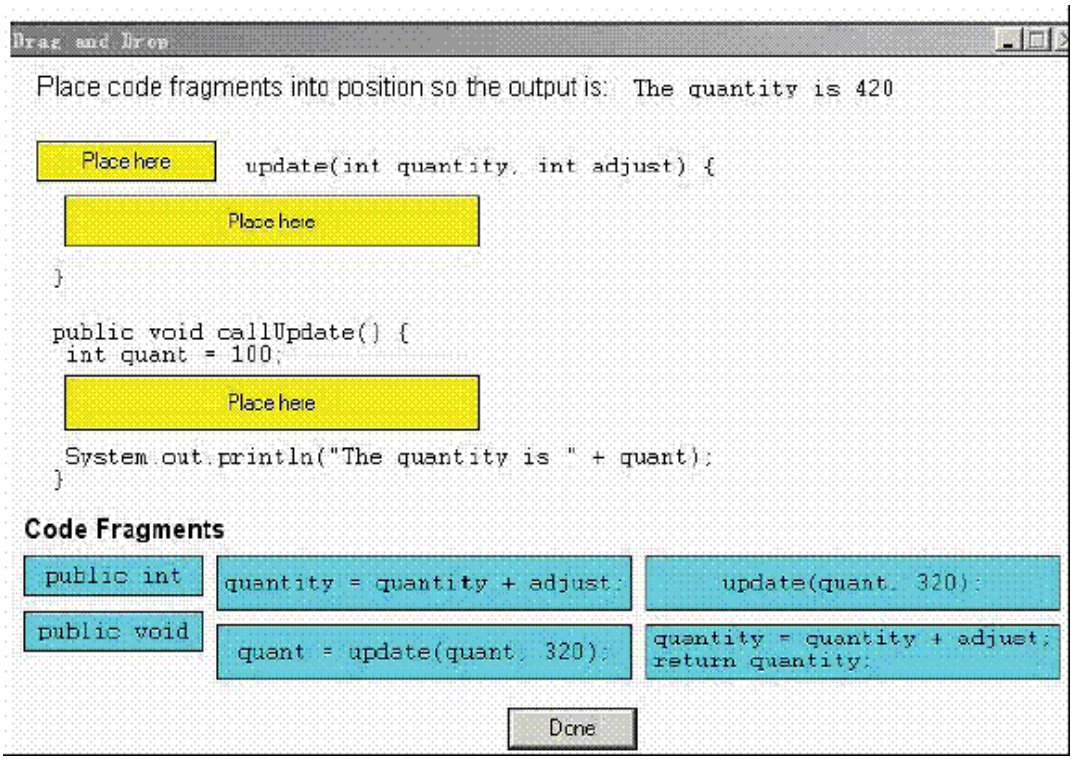


Answer:

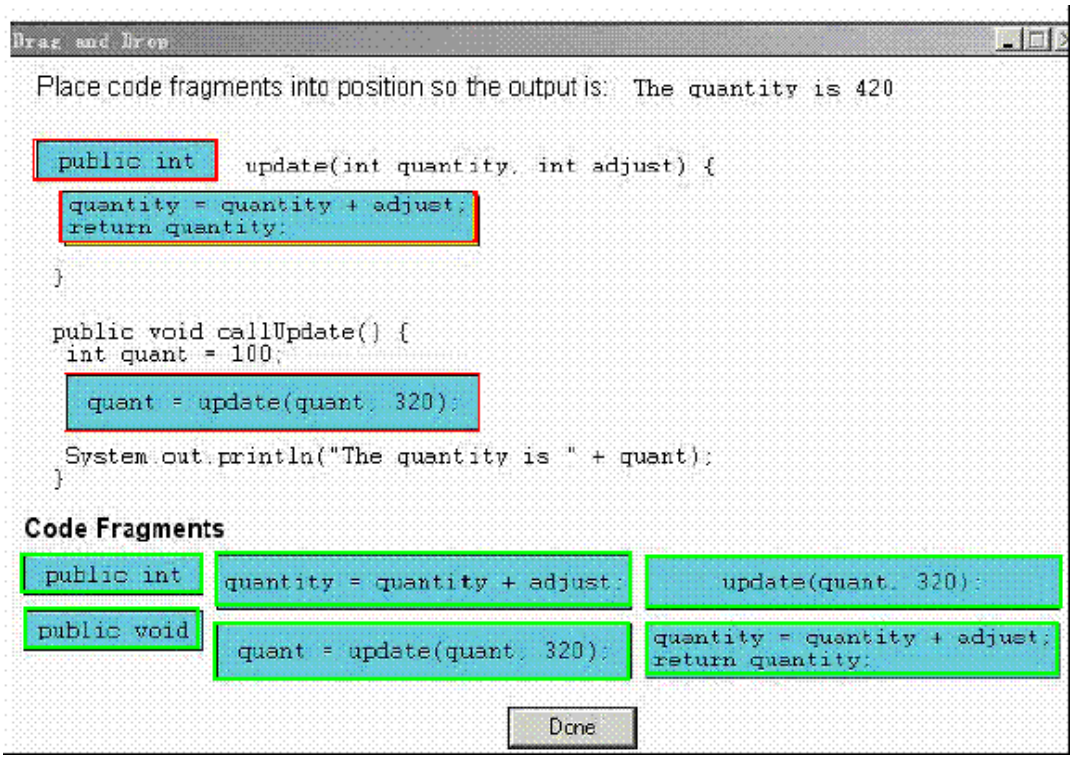


QUESTION NO: 117 DRAG DROP

Click the Task button.

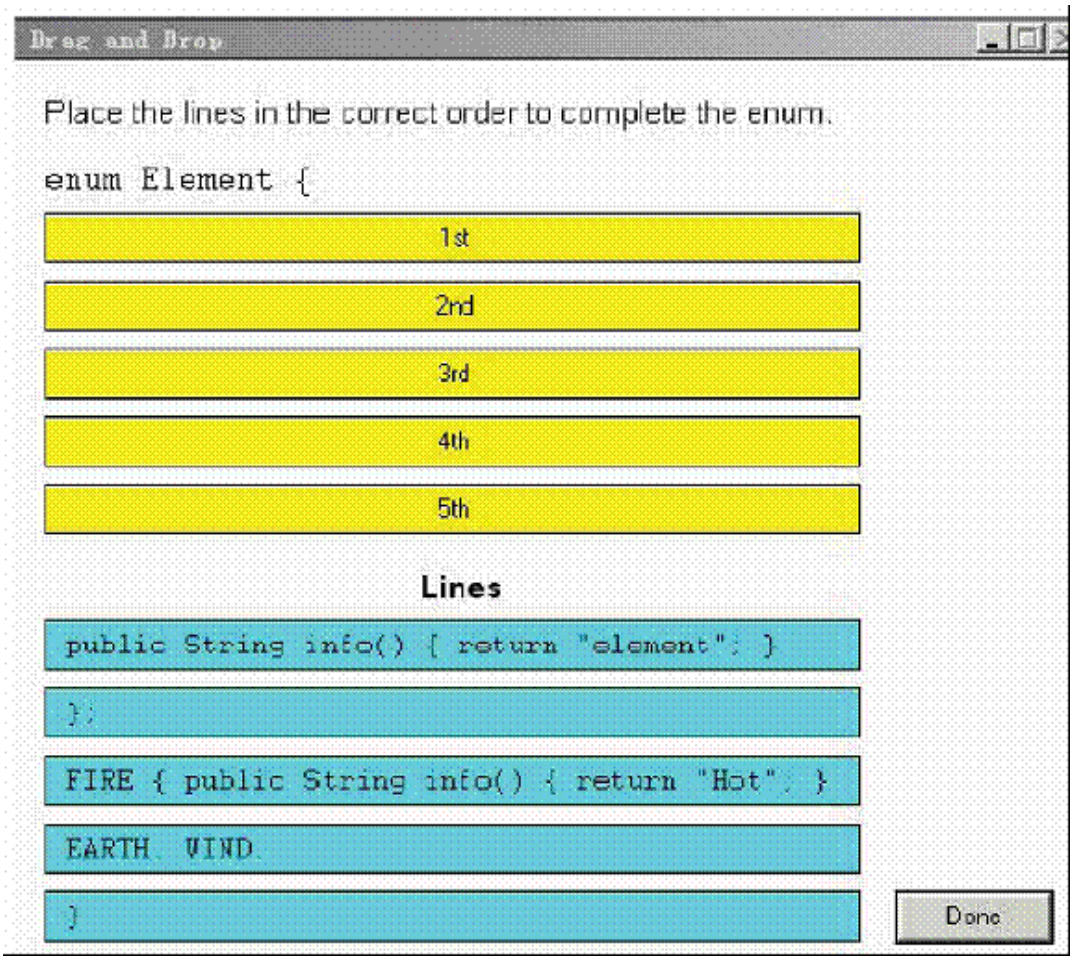


Answer:

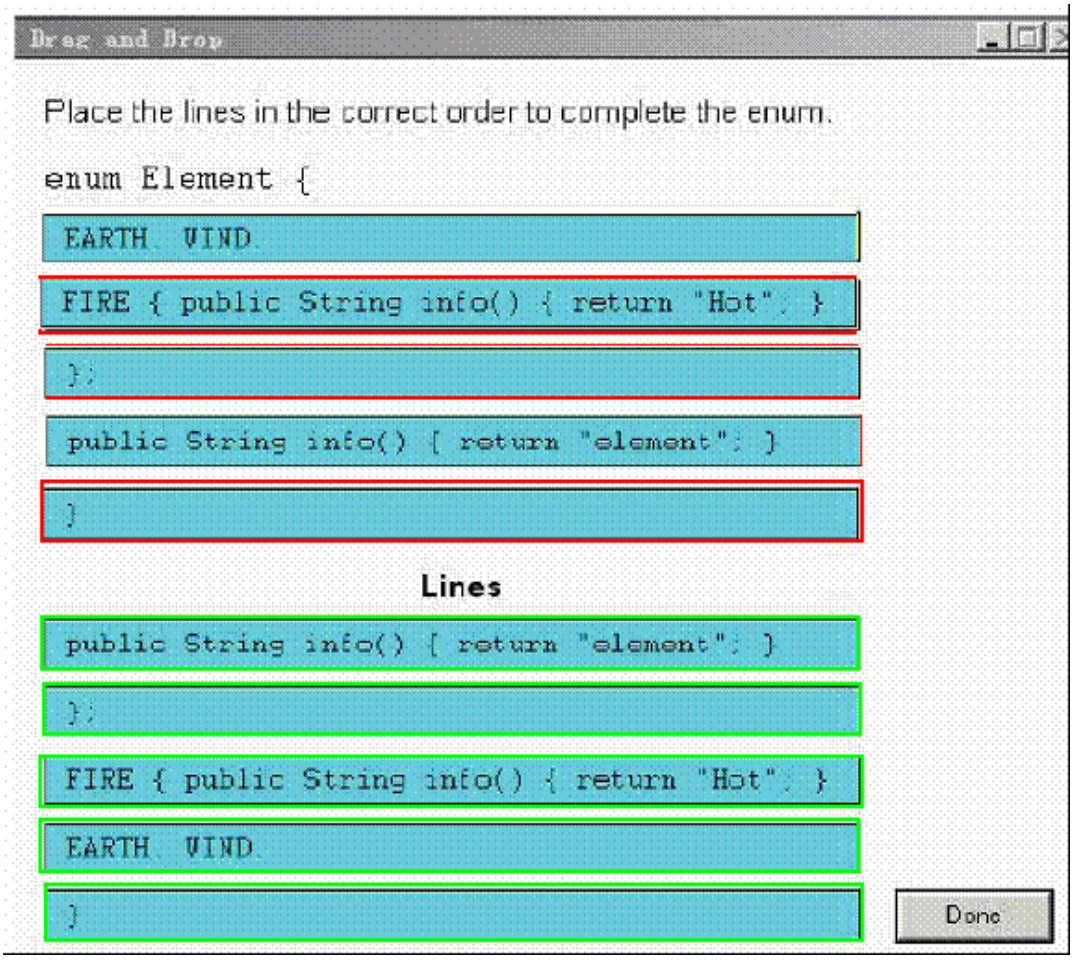


QUESTION NO: 118 DRAG DROP

Click the Task button.

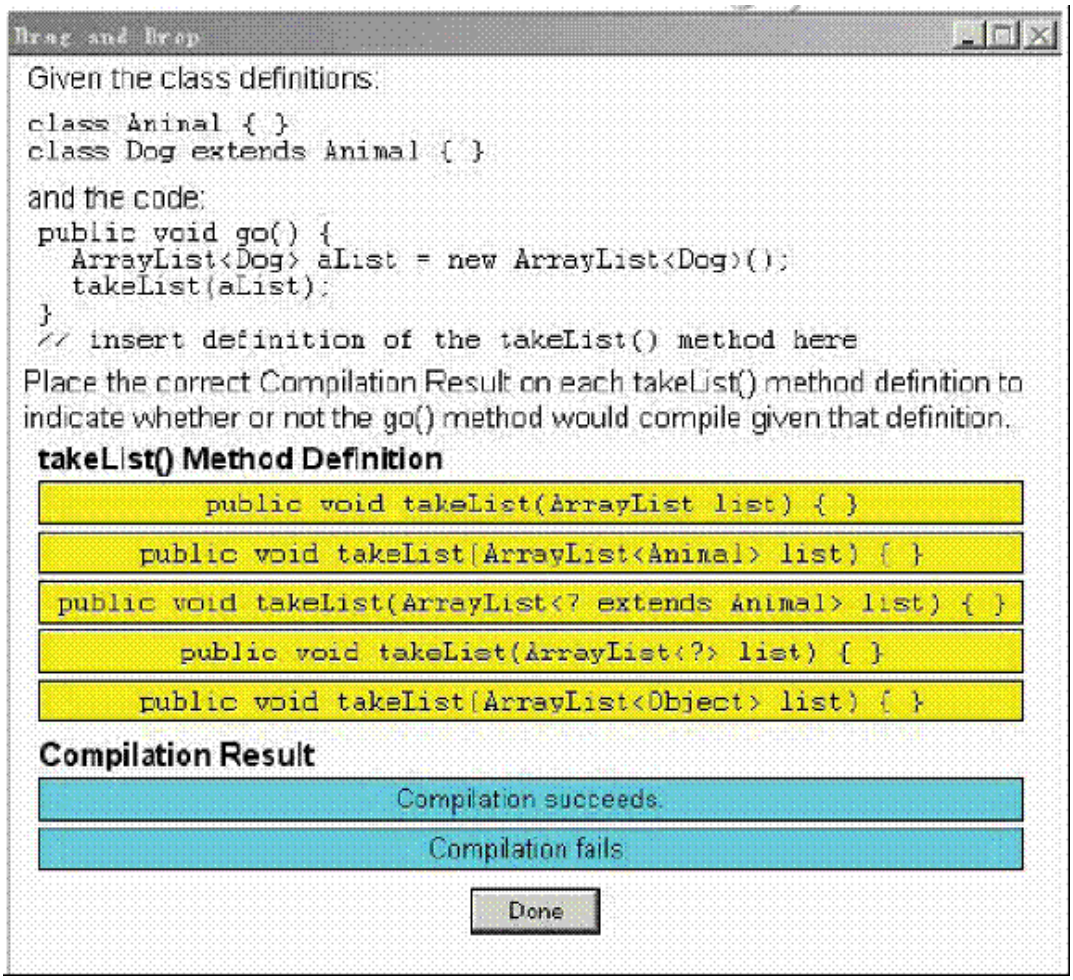

Drag and Drop
Place the lines in the correct order to complete the enum.
enum Element {
1st
2nd
3rd
4th
5th
Lines
public String info() { return "element"; }
};
FIRE { public String info() { return "Hot"; }
EARTH, WIND
}
Done

Answer:

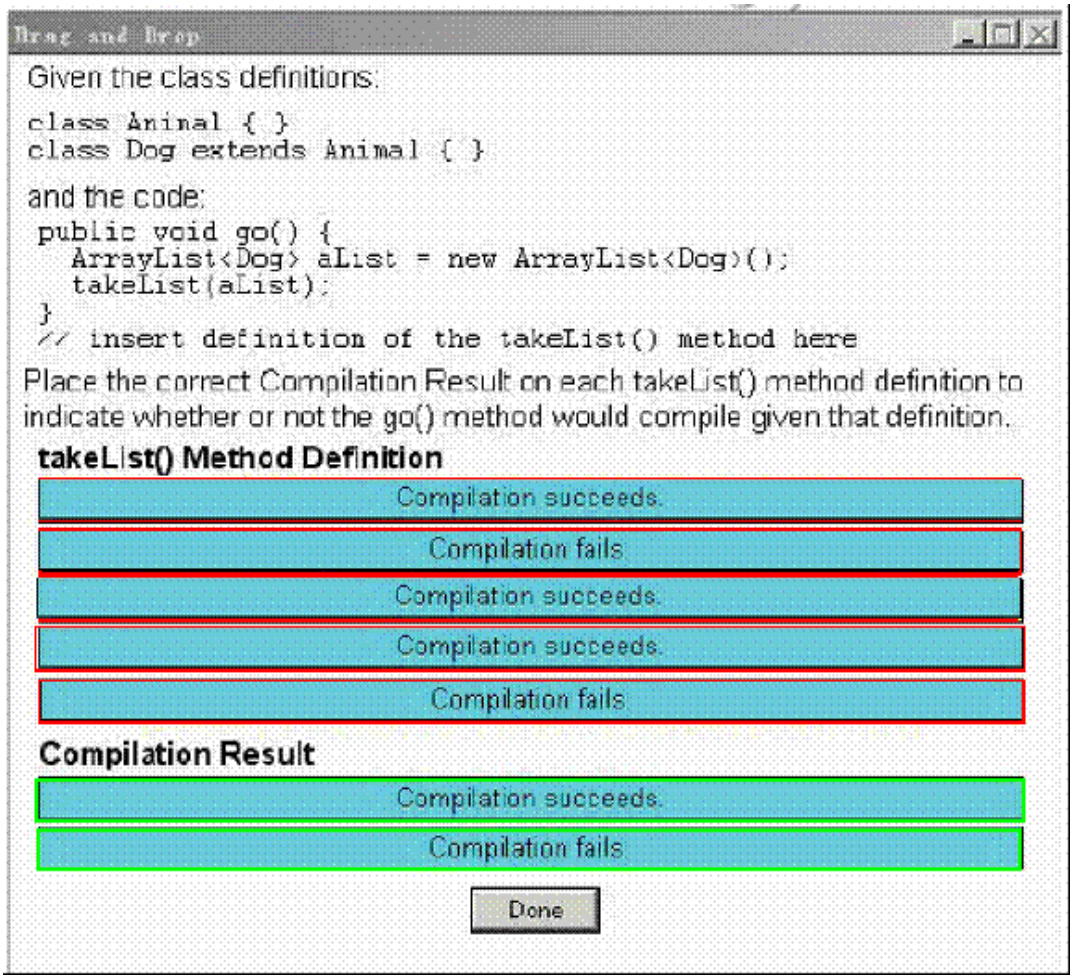


QUESTION NO: 119 DRAG DROP

Click the Task button.


Drag and Drop
Given the class definitions:
class Animal { }
class Dog extends Animal { }
and the code:
public void go() {
ArrayList<Dog> aList = new ArrayList<Dog>();
takeList(aList);
}
// insert definition of the takeList() method here
Place the correct Compilation Result on each takeList() method definition to indicate whether or not the go() method would compile given that definition.
takeList() Method Definition
public void takeList(ArrayList list) { }
public void takeList(ArrayList<Animal> list) { }
public void takeList(ArrayList<? extends Animal> list) { }
public void takeList(ArrayList<?> list) { }
public void takeList(ArrayList<Object> list) { }
Compilation Result
Compilation succeeds
Compilation fails
Done

Answer:



QUESTION NO: 120

Which Man class properly represents the relationship "Man has a best friend who is a Dog"?

A. class Man extends Dog { }
B. class Man implements Dog { }
C. class Man { private BestFriend dog; }
D. class Man { private Dog bestFriend; }
E. class Man { private Dog<bestFriend>; }
F. class Man { private BestFriend<dog>; }

Answer: D

Explanation:

QUESTION NO: 121

A company has a business application that provides its users with many different reports: receivables reports, payables reports, revenue projects, and so on. The company has just

purchased some new, state-of-the-art, wireless printers, and a programmer has been assigned the task of enhancing all of the reports to use not only the company's old printers, but the new wireless printers as well. When the programmer starts looking into the application, the programmer discovers that because of the design of the application, it is necessary to make changes to each report to support the new printers. Which two design concepts most likely explain this situation? (Choose two.)

A. Inheritance
B. Low cohesion
C. Tight coupling
D. High cohesion
E. Loose coupling
F. Object immutability

Answer: B,C
Explanation:

QUESTION NO: 122

Given:

2. public class Hi {

3. void m1() { }

4. protected void() m2 { }

5. }

6. class Lois extends Hi {

7. // insert code here

8. }

Which four code fragments, inserted independently at line 7, will compile? (Choose four.)

A. public void m1() { }
B. protected void m1() { }
C. private void m1() { }
D. void m2() { }
E. public void m2() { }
F. protected void m2() { }
G. private void m2() { }

Answer: A,B,E,F

Explanation:

QUESTION NO: 123

Given:

10: public class Hello {

11: String title;

12: int value;

13: public Hello() {

14: title += " World";

15: }

16: public Hello(int value) {

17: this.value = value;

18: title = "Hello";

19: Hello();

20: }

21: }

and:

30: Hello c = new Hello(5);

31: System.out.println(c.title);

What is the result?

A. Hello
B. Hello World
C. Compilation fails.
D. Hello World 5
E. The code runs with no output.
F. An exception is thrown at runtime.

Answer: C

Explanation:

QUESTION NO: 124

Given:

3. class Employee {

4. String name; double baseSalary;

5. Employee(String name, double baseSalary) {

6. this.name = name;

7. this.baseSalary = baseSalary;

8. }

9. }

10. public class SalesPerson extends Employee {

11. double commission;

12. public SalesPerson(String name, double baseSalary, double commission) {

13. // insert code here

14. }

15. }

Which two code fragments, inserted independently at line 13, will compile? (Choose two.)

A. super(name, baseSalary);
B. this.commission = commission;
C. super();
this.commission = commission;
D. this.commission = commission;
super();
E. super(name, baseSalary);
this.commission = commission;
F. this.commission = commission;
super(name, baseSalary);
G. super(name, baseSalary, commission);

Answer: A,E

Explanation:

QUESTION NO: 125

A team of programmers is reviewing a proposed API for a new utility class. After some discussion, they realize that they can reduce the number of methods in the API without losing any functionality. If they implement the new design, which two OO principles will they be promoting?

A. Looser coupling
B. Tighter coupling
C. Lower cohesion
D. Higher cohesion
E. Weaker encapsulation
F. Stronger encapsulation

Answer: A

Explanation:

QUESTION NO: 126

Given:

```
1. class ClassA {
2. public int numberOfInstances;
3. protected ClassA(int numberOfInstances) {
4. this.numberOfInstances = numberOfInstances;
5. }
6. }
7. public class ExtendedA extends ClassA {
8. private ExtendedA(int numberOfInstances) {
9. super(numberOfInstances);
10. }
11. public static void main(String[] args) {
12. ExtendedA ext = new ExtendedA(420);
13. System.out.print(ext.numberOfInstances);
14. }
```

15. }

Which statement is true?

A. 420 is the output.
B. An exception is thrown at runtime.
C. All constructors must be declared public.
D. Constructors CANNOT use the private modifier.
E. Constructors CANNOT use the protected modifier.

Answer: A
Explanation:

QUESTION NO: 127

Given:

5. class Building { }

6. public class Barn extends Building {

7. public static void main(String[] args) {

8. Building build1 = new Building();

9. Barn barn1 = new Barn();

10. Barn barn2 = (Barn) build1;

11. Object obj1 = (Object) build1;

12. String str1 = (String) build1;

13. Building build2 = (Building) barn1;

14. }

15. }

Which is true?

A. If line 10 is removed, the compilation succeeds.
B. If line 11 is removed, the compilation succeeds.
C. If line 12 is removed, the compilation succeeds.
D. If line 13 is removed, the compilation succeeds.
E. More than one line must be removed for compilation to succeed.

Answer: C
Explanation:

QUESTION NO: 128

Given:

1. public class TestOne {

2. public static void main (String[] args) throws Exception {

3. Thread.sleep(3000);

4. System.out.println("sleep");

5. }

6. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "sleep".
D. The code executes normally, but nothing is printed.

Answer: C
Explanation:

QUESTION NO: 129

Given:

1. public class Threads4 {

2. public static void main (String[] args) {

3. new Threads4().go();

4. }

5. public void go() {

6. Runnable r = new Runnable() {

```
7. public void run() {
8. System.out.print("foo");
9. }
10. };
11. Thread t = new Thread(r);
12. t.start();
13. t.start();
14. }
15. }
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "foo".
D. The code executes normally, but nothing is printed.

Answer: B
Explanation:

QUESTION NO: 130

Which two statements are true? (Choose two.)

A. It is possible for more than two threads to deadlock at once.
B. The JVM implementation guarantees that multiple threads cannot enter into a deadlocked state.
C. Deadlocked threads release once their sleep() method's sleep duration has expired.
D. Deadlocking can occur only when the wait(), notify(), and notifyAll() methods are used incorrectly.
E. It is possible for a single-threaded application to deadlock if synchronized blocks are used incorrectly.
F. If a piece of code is capable of deadlocking, you cannot eliminate the possibility of deadlocking by inserting invocations of Thread.yield().

Answer: A,F
Explanation:

QUESTION NO: 131

Given:

1. public class Threads3 implements Runnable {

2. public void run() {

3. System.out.print("running");

4. }

5. public static void main(String[] args) {

6. Thread t = new Thread(new Threads3());

7. t.run();

8. t.run();

9. t.start();

10. }

11. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes and prints "running".
D. The code executes and prints "runningrunning".
E. The code executes and prints "runningrunningrunning".

Answer: E
Explanation:

QUESTION NO: 132

Given classes defined in two different files:

1. package util;

2. public class BitUtils {

3. public static void process(byte[] b) { /* more code here */ }

4. }

1. package app;

2. public class SomeApp {

3. public static void main(String[] args) {

4. byte[] bytes = new byte[256];

5. // insert code here

6. }

7. }

What is required at line 5 in class SomeApp to use the process method of BitUtils?

A. process(bytes);
B. BitUtils.process(bytes);
C. util.BitUtils.process(bytes);
D. SomeApp cannot use methods in BitUtils.
E. import util.BitUtils.*; process(bytes);

Answer: C
Explanation:

QUESTION NO: 133

A developer is creating a class Book, that needs to access class Paper. The Paper class is deployed in a JAR named myLib.jar. Which three, taken independently, will allow the developer to use the Paper class while compiling the Book class? (Choose three.)

A. The JAR file is located at $JAVA_HOME/jre/classes/myLib.jar.
B. The JAR file is located at $JAVA_HOME/jre/lib/ext/myLib.jar..
C. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar/Paper.class.
D. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar.
E. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -cp /foo/myLib.jar/Paper Book.java.
F. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -d /foo/myLib.jar Book.java
G. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -classpath /foo/myLib.jar Book.java

Answer: B,D,G
Explanation:

QUESTION NO: 134

Given:

11. class Snoochy {

12. Boochy booch;

13. public Snoochy() { booch = new Boochy(this); }

14. }

15.

16. class Boochy {

17. Snoochy snooch;

18. public Boochy(Snoochy s) { snooch = s; }

19. } And the statements:

21. public static void main(String[] args) {

22. Snoochy snoog = new Snoochy();

23. snoog = null;

24. // more code here

25. }

Which statement is true about the objects referenced by snoog, snooch, and booch immediately after line 23 executes?

A. None of these objects are eligible for garbage collection.
B. Only the object referenced by booch is eligible for garbage collection.
C. Only the object referenced by snoog is eligible for garbage collection.
D. Only the object referenced by snooch is eligible for garbage collection.
E. The objects referenced by snooch and booch are eligible for garbage collection.

Answer: E
Explanation:

QUESTION NO: 135

Given:

3. public class Batman {

4. int squares = 81;

5. public static void main(String[] args) {

6. new Batman().go();

7. }

8. void go() {

9. incr(++squares);

10. System.out.println(squares);

11. }

12. void incr(int squares) { squares += 10; }

13. }

What is the result?

A. 81
B. 82
C. 91
D. 92
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 136

Given classes defined in two different files:

1. package util;

2. public class BitUtils {

3. private static void process(byte[] b) {}

4. }

1. package app;

2. public class SomeApp {

3. public static void main(String[] args) {

4. byte[] bytes = new byte[256];

5. // insert code here

6. }

7. }

What is required at line 5 in class SomeApp to use the process method of BitUtils?

A. process(bytes);
B. BitUtils.process(bytes);
C. app.BitUtils.process(bytes);
D. util.BitUtils.process(bytes);
E. import util.BitUtils.*; process(bytes);
F. SomeApp cannot use the process method in BitUtils.

Answer: F
Explanation:

QUESTION NO: 137

A UNIX user named Bob wants to replace his chess program with a new one, but he is not sure where the old one is installed. Bob is currently able to run a Java chess program starting from his home directory /home/bob using the command: java -classpath /test:/home/bob/downloads/*.jar games.Chess Bob's CLASSPATH is set (at login time) to: /usr/lib:/home/bob/classes:/opt/java/lib:/opt/java/lib/*.jar What is a possible location for the Chess.class file?

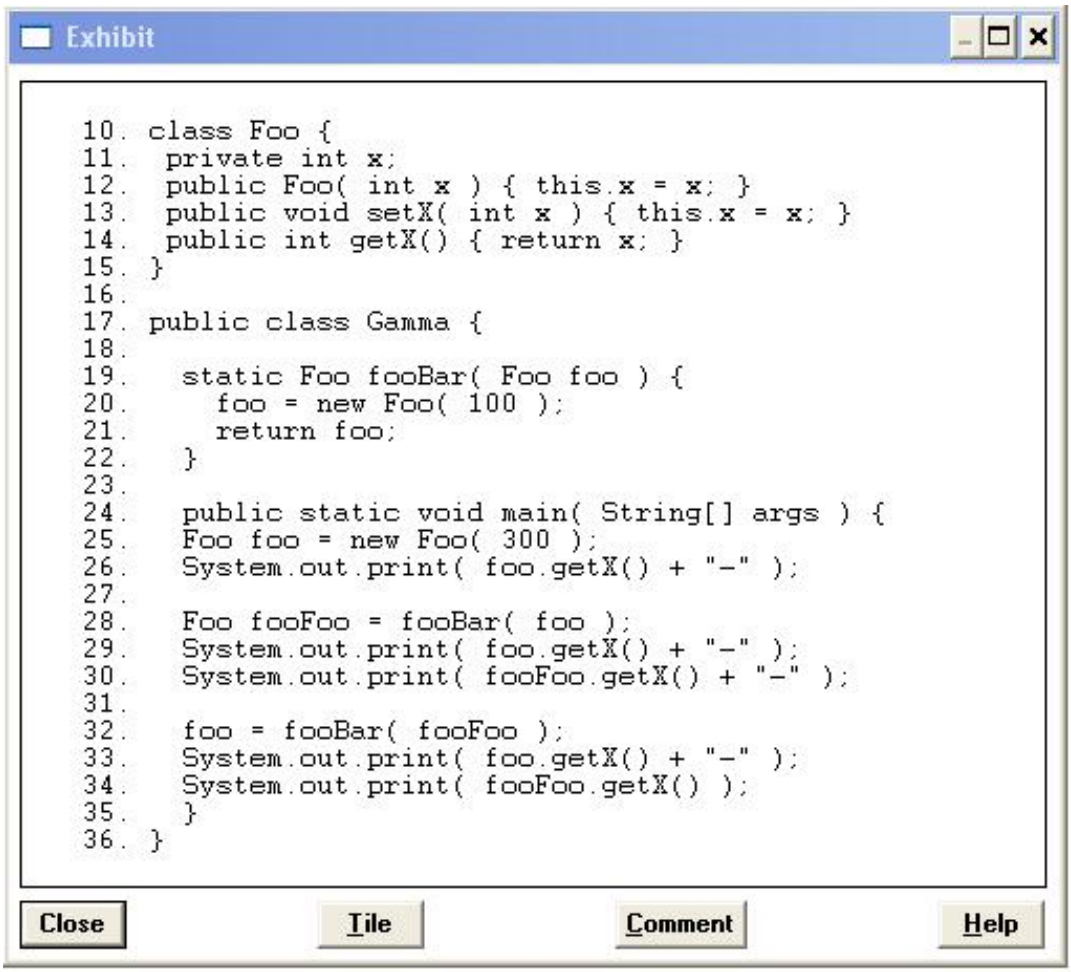
A. /test/Chess.class
B. /home/bob/Chess.class
C. /test/games/Chess.class
D. /usr/lib/games/Chess.class
E. /home/bob/games/Chess.class
F. inside jarfile /opt/java/lib/Games.jar (with a correct manifest)
G. inside jarfile /home/bob/downloads/Games.jar (with a correct manifest)

Answer: C

Explanation:

QUESTION NO: 138

Click the Exhibit button. What is the output of the program shown in the exhibit?



A. 300-100-100-100-100
B. 300-300-100-100-100
C. 300-300-300-100-100
D. 300-300-300-300-100

Answer: B
Explanation:

QUESTION NO: 139

Given the following directory structure: bigProject |--source | |--Utils.java | |--classes |-- And the following command line invocation: javac -d classes source/Utils.java Assume the current directory

is bigProject, what is the result?

A. If the compile is successful, Utils.class is added to the source directory.
B. The compiler returns an invalid flag error.
C. If the compile is successful, Utils.class is added to the classes directory.
D. If the compile is successful, Utils.class is added to the bigProject directory.

Answer: C
Explanation:

QUESTION NO: 140

Given:

3. interface Fish { }

4. class Perch implements Fish { }

5. class Walleye extends Perch { }

6. class Bluegill { }

7. public class Fisherman {

8. public static void main(String[] args) {

9. Fish f = new Walleye();

10. Walleye w = new Walleye();

11. Bluegill b = new Bluegill();

12. if(f instanceof Perch) System.out.print("f-p ");

13. if(w instanceof Fish) System.out.print("w-f ");

14. if(b instanceof Fish) System.out.print("b-f ");

15. }

16. }

What is the result?

A. w-f
B. f-p w-f
C. w-f b-f

D. f-p w-f b-f
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 141

Given:

1. public class Breaker2 {

2. static String o = "";

3. public static void main(String[] args) {

4. z:

5. for(int x = 2; x < 7; x++) {

6. if(x==3) continue;

7. if(x==5) break z;

8. o = o + x;

9. }

10. System.out.println(o);

11. }

12. }

What is the result?

A. 2
B. 24
C. 234
D. 246
E. 2346
F. Compilation fails.

Answer: B
Explanation:

QUESTION NO: 142

Given:

11. public void testIfA() {

12. if (testIfB("True")) {

13. System.out.println("True");

14. } else {

15. System.out.println("Not true");

16. }

17. }

18. public Boolean testIfB(String str) {

19. return Boolean.valueOf(str);

20. }

What is the result when method testIfA is invoked?

A. True
B. Not true
C. An exception is thrown at runtime.
D. Compilation fails because of an error at line 12.
E. Compilation fails because of an error at line 19.

Answer: A
Explanation:

QUESTION NO: 143

Given:

1. public class Donkey {

2. public static void main(String[] args) {

3. boolean assertsOn = false;

4. assert (assertsOn) : assertsOn = true;

5. if(assertsOn) {

6. System.out.println("assert is on");

7. }

8. }

9. }

If class Donkey is invoked twice, the first time without assertions enabled, and the second time with assertions enabled, what are the results?

A. no output
B. no output
assert is on
C. assert is on
D. no output
An AssertionError is thrown.
E. assert is on
An AssertionError is thrown.

Answer: D

Explanation:

QUESTION NO: 144

Given:

31. // some code here

32. try {

33. // some code here

34. } catch (SomeException se) {

35. // some code here

36. } finally {

37. // some code here

38. }

Under which three circumstances will the code on line 37 be executed? (Choose three.)

A. The instance gets garbage collected.
B. The code on line 33 throws an exception.

C. The code on line 35 throws an exception.
D. The code on line 31 throws an exception.
E. The code on line 33 executes successfully.

Answer: B,C,E
Explanation:

QUESTION NO: 145

Given:

22. public void go() {

23. String o = "";

24. z:

25. for(int x = 0; x < 3; x++) {

26. for(int y = 0; y < 2; y++) {

27. if(x==1) break;

28. if(x==2 && y==1) break z;

29. o = o + x + y;

30. }

31. }

32. System.out.println(o);

33. }

What is the result when the go() method is invoked?

A. 00
B. 0001
C. 000120
D. 00012021
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 146

Given:

```
11. static void test() {
12. try {
13. String x = null;
14. System.out.print(x.toString() + " ");
15. }
16. finally { System.out.print("finally "); }
17. }
18. public static void main(String[] args) {
19. try { test(); }
20. catch (Exception ex) { System.out.print("exception "); }
21. }
```

What is the result?

A. null
B. finally
C. null finally
D. Compilation fails.
E. finally exception

Answer: E
Explanation:

QUESTION NO: 147

Given:

```
10. interface Foo {}
11. class Alpha implements Foo {}
12. class Beta extends Alpha {}
13. class Delta extends Beta {
```

14. public static void main(String[] args) {

15. Beta x = new Beta();

16. // insert code here

17. }

18. }

Which code, inserted at line 16, will cause a java.lang.ClassCastException?

A. Alpha a = x;
B. Foo f = (Delta)x;
C. Foo f = (Alpha)x;
D. Beta b = (Beta)(Alpha)x;

Answer: B
Explanation:

QUESTION NO: 148

Given:

33. try {

34. // some code here

35. } catch (NullPointerException e1) {

36. System.out.print("a");

37. } catch (Exception e2) {

38. System.out.print("b");

39. } finally {

40. System.out.print("c");

41. }

If some sort of exception is thrown at line 34, which output is possible?

A. a
B. b
C. c

D. ac
E. abc

Answer: D
Explanation:

QUESTION NO: 149

Given:

11. public class Test {

12. public enum Dogs {collie, harrier, shepherd};

13. public static void main(String [] args) {

14. Dogs myDog = Dogs.shepherd;

15. switch (myDog) {

16. case collie:

17. System.out.print("collie ");

18. case default:

19. System.out.print("retriever ");

20. case harrier:

21. System.out.print("harrier ");

22. }

23. }

24. }

What is the result?

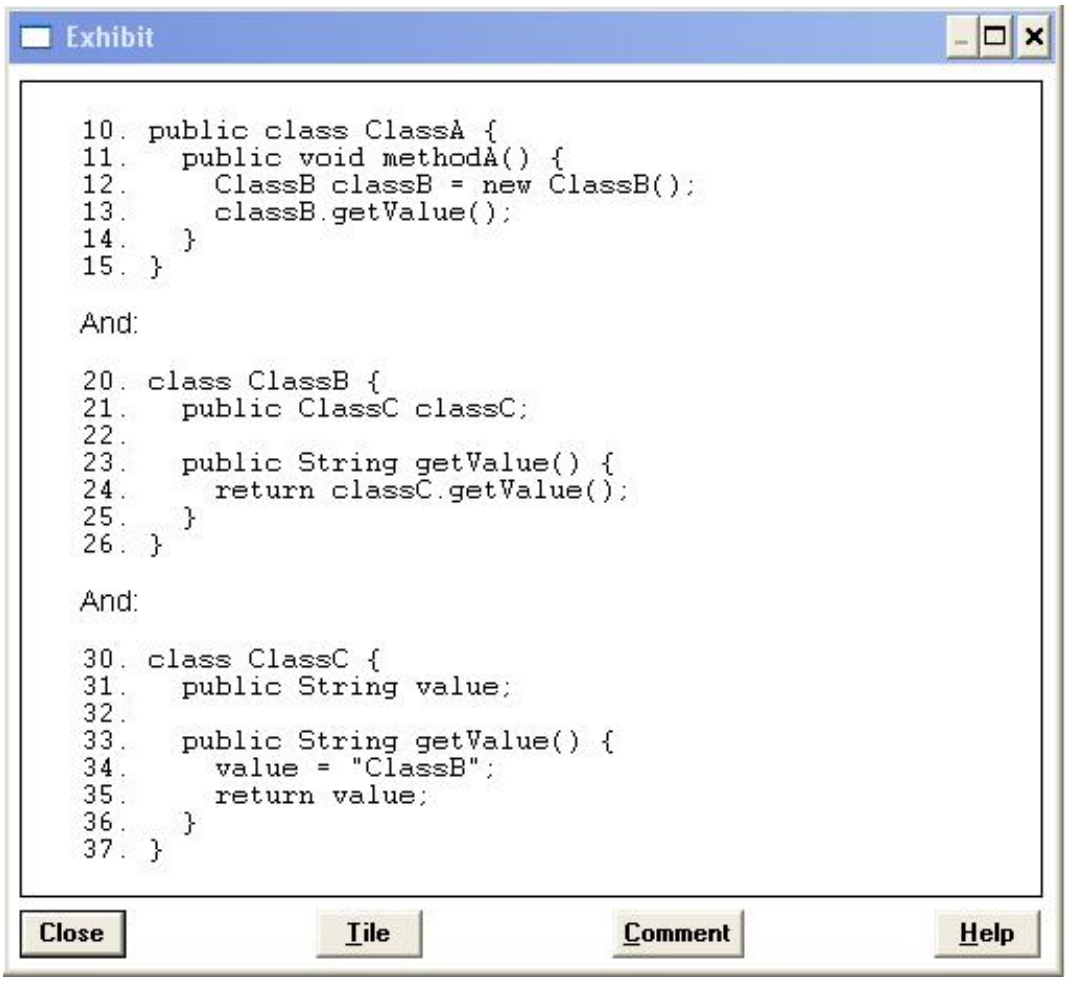
A. harrier
B. shepherd
C. retriever
D. Compilation fails.
E. retriever harrier
F. An exception is thrown at runtime.

Answer: D

Explanation:

QUESTION NO: 150

Click the Exhibit button. Given: ClassA a = new ClassA(); a.methodA(); What is the result?



A. Compilation fails.
B. ClassC is displayed.
C. The code runs with no output.
D. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 151

Given:

```
11. static void test() throws RuntimeException {
12. try {
13. System.out.print("test ");
14. throw new RuntimeException();
15. }
16. catch (Exception ex) { System.out.print("exception "); }
17. }
18. public static void main(String[] args) {
19. try { test(); }
20. catch (RuntimeException ex) { System.out.print("runtime "); }
21. System.out.print("end ");
22. }
```

What is the result?

A. test end
B. Compilation fails.
C. test runtime end
D. test exception end
E. A Throwable is thrown by main at runtime.

Answer: D
Explanation:

QUESTION NO: 152

Given:

```
1. public class Plant {
2. private String name;
3. public Plant(String name) { this.name = name; }
4. public String getName() { return name; }
5. }
```

1. public class Tree extends Plant {

2. public void growFruit() { }

3. public void dropLeaves() { }

4. }

Which statement is true?

A. The code will compile without changes.
B. The code will compile if public Tree() { Plant(); } is added to the Tree class.
C. The code will compile if public Plant() { Tree(); } is added to the Plant class.
D. The code will compile if public Plant() { this("fern"); } is added to the Plant class.
E. The code will compile if public Plant() { Plant("fern"); } is added to the Plant class.

Answer: D
Explanation:

QUESTION NO: 153

Given:

10. class Line {

11. public static class Point {}

12. }

13.

14. class Triangle {

15. // insert code here

16. }

Which code, inserted at line 15, creates an instance of the Point class defined in Line?

A. Point p = new Point();
B. Line.Point p = new Line.Point();
C. The Point class cannot be instatiated at line 15.
D. Line l = new Line() ; l.Point p = new l.Point();

Answer: B
Explanation:

QUESTION NO: 154

Given:

10. class Nav{

11. public enum Direction { NORTH, SOUTH, EAST, WEST }

12. }

13. public class Sprite{

14. // insert code here

15. }

Which code, inserted at line 14, allows the Sprite class to compile?

A. Direction d = NORTH;
B. Nav.Direction d = NORTH;
C. Direction d = Direction.NORTH;
D. Nav.Direction d = Nav.Direction.NORTH;

Answer: D
Explanation:

QUESTION NO: 155

Given:

10. interface Data { public void load(); }

11. abstract class Info { public abstract void load(); }

Which class correctly uses the Data interface and Info class?

A. public class Employee extends Info implements Data {
public void load() { /*do something*/ }
}
B. public class Employee implements Info extends Data {
public void load() { /*do something*/ }
}
C. public class Employee extends Info implements Data {

public void load(){ /*do something*/ }
public void Info.load(){ /*do something*/ }
}
D. public class Employee implements Info extends Data {
public void Data.load(){ /*do something*/ }
public void load(){ /*do something*/ }
}
E. public class Employee implements Info extends Data {
public void load(){ /*do something*/ }
public void Info.load(){ /*do something*/ }
}
F. public class Employee extends Info implements Data{
public void Data.load() { /*do something*/ }
public void Info.load() { /*do something*/ }
}

Answer: A
Explanation:

QUESTION NO: 156

Given:

11. public class Rainbow {

12. public enum MyColor {

13. RED(0xff0000), GREEN(0x00ff00), BLUE(0x0000ff);

14. private final int rgb;

15. MyColor(int rgb) { this.rgb = rgb; }

16. public int getRGB() { return rgb; }

17. };

18. public static void main(String[] args) {

19. // insert code here

20. }

21. }

Which code fragment, inserted at line 19, allows the Rainbow class to compile?

A. MyColor skyColor = BLUE;
B. MyColor treeColor = MyColor.GREEN;
C. if(RED.getRGB() < BLUE.getRGB()) { }
D. Compilation fails due to other error(s) in the code.
E. MyColor purple = new MyColor(0xff00ff);
F. MyColor purple = MyColor.BLUE + MyColor.RED;

Answer: B
Explanation:

QUESTION NO: 157

Given:

10. class One {

11. void foo() { }

12. }

13. class Two extends One {

14. //insert method here

15. }

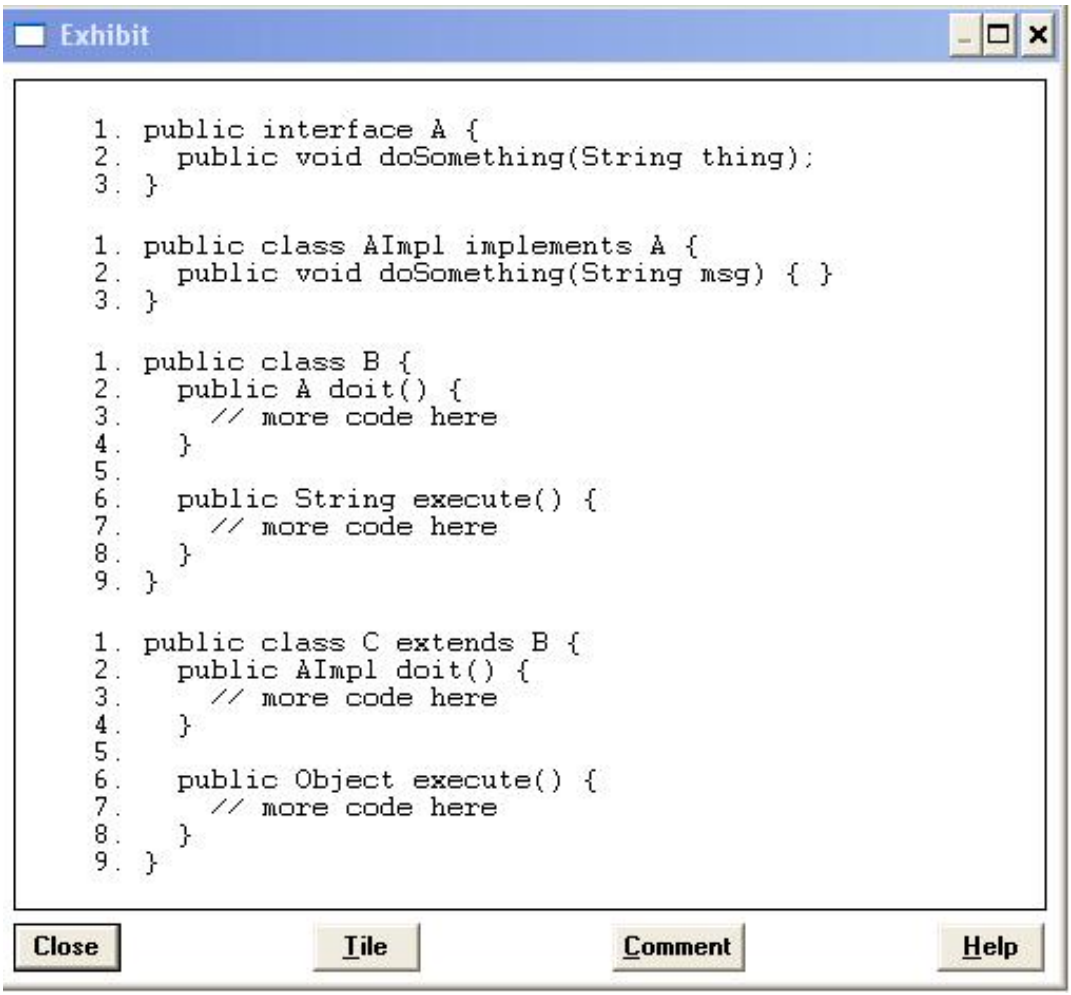
Which three methods, inserted individually at line 14, will correctly complete class Two? (Choose three.)

A. int foo() { /* more code here */ }
B. void foo() { /* more code here */ }
C. public void foo() { /* more code here */ }
D. private void foo() { /* more code here */ }
E. protected void foo() { /* more code here */ }

Answer: B,C,E
Explanation:

QUESTION NO: 158

Click the Exhibit button. Which statement is true about the classes and interfaces in the exhibit?



A. Compilation will succeed for all classes and interfaces.
B. Compilation of class C will fail because of an error in line 2.
C. Compilation of class C will fail because of an error in line 6.
D. Compilation of class AImpl will fail because of an error in line 2.

Answer: C
Explanation:

QUESTION NO: 159

Given:

11. public interface A { public void m1(); }

12.

13. class B implements A { }

14. class C implements A { public void m1() { } }

15. class D implements A { public void m1(int x) { } }

16. abstract class E implements A { }

17. abstract class F implements A { public void m1() { } }

18. abstract class G implements A { public void m1(int x) { } }

What is the result?

A. Compilation succeeds.
B. Exactly one class does NOT compile.
C. Exactly two classes do NOT compile.
D. Exactly four classes do NOT compile.
E. Exactly three classes do NOT compile.

Answer: C
Explanation:

QUESTION NO: 160

Given:

1. class Alligator {

2. public static void main(String[] args) {

3. int []x[] = {{1,2}, {3,4,5}, {6,7,8,9}};

4. int [][]y = x;

5. System.out.println(y[2][1]);

6. }

7. }

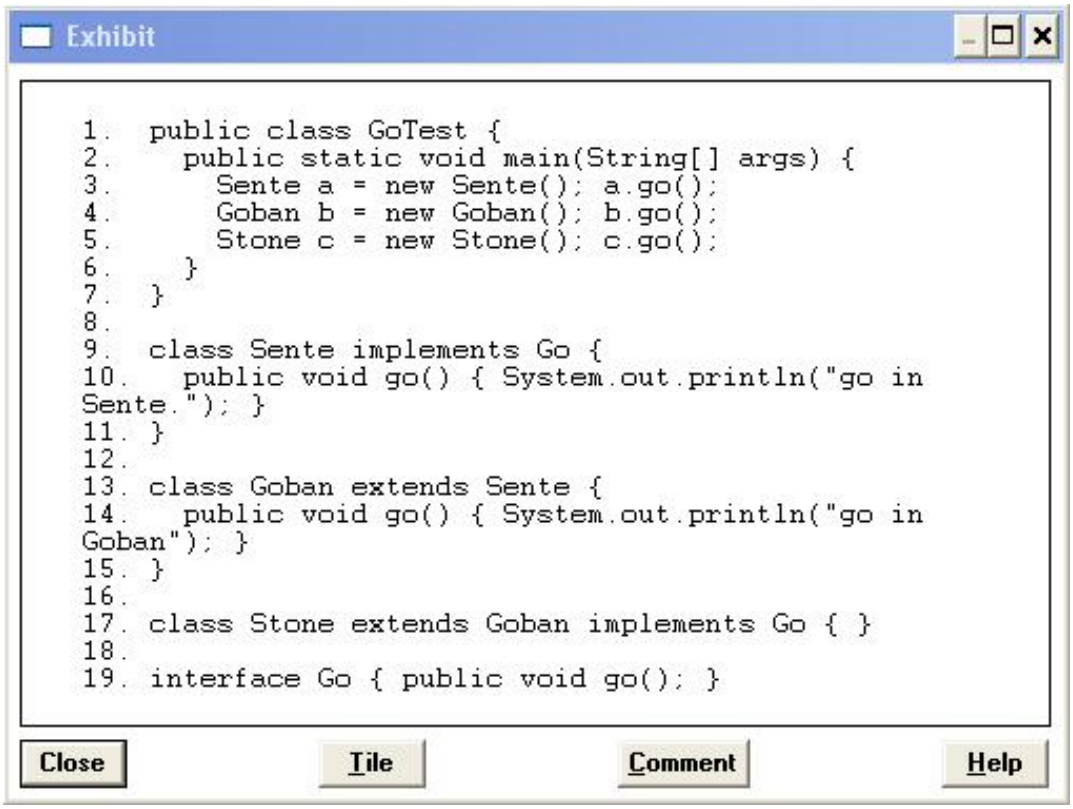
What is the result?

A. 2
B. 3
C. 4
D. 6
E. 7
F. Compilation fails.

Answer: E
Explanation:

QUESTION NO: 161

Click the Exhibit button. What is the result?



A. go in Goban
go in Sente
B. go in Sente
go in Goban
C. go in Sente
go in Goban
D. go in Goban
go in Sente
E. Compilation fails because of an error in line 17.

Answer: C
Explanation:

QUESTION NO: 162

Given:

12. NumberFormat nf = NumberFormat.getInstance();

13. nf.setMaximumFractionDigits(4);

14. nf.setMinimumFractionDigits(2);

15. String a = nf.format(3.1415926);

16. String b = nf.format(2);

Which two statements are true about the result if the default locale is Locale.US? (Choose two.)

A. The value of b is 2.
B. The value of a is 3.14.
C. The value of b is 2.00.
D. The value of a is 3.141.
E. The value of a is 3.1415.
F. The value of a is 3.1416.
G. The value of b is 2.0000.

Answer: C,F
Explanation:

QUESTION NO: 163

Given:

11. String test = "a1b2c3";

12. String[] tokens = test.split("\\d");

13. for(String s: tokens) System.out.print(s + " ");

What is the result?

A. a b c
B. 1 2 3
C. a1b2c3
D. a1 b2 c3
E. Compilation fails.
F. The code runs with no output.
G. An exception is thrown at runtime.

Answer: A
Explanation:

QUESTION NO: 164

Given:

11. class Converter {

12. public static void main(String[] args) {

13. Integer i = args[0];

14. int j = 12;

15. System.out.println("It is " + (j==i) + " that j==i.");

16. }

17. }

What is the result when the programmer attempts to compile the code and run it with the command java Converter 12?

A. It is true that j==i.
B. It is false that j==i.
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 13.

Answer: D
Explanation:

QUESTION NO: 165

Given:

1. public class BuildStuff {

2. public static void main(String[] args) {

3. Boolean test = new Boolean(true);

4. Integer x = 343;

5. Integer y = new BuildStuff().go(test, x);

6. System.out.println(y);

7. }

8. int go(Boolean b, int i) {

9. if(b) return (i/7);

10. return (i/49);

11. }

12. }

What is the result?

A. 7
B. 49
C. 343
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 166

Given:

12. String csv = "Sue,5,true,3";

13. Scanner scanner = new Scanner(csv);

14. scanner.useDelimiter(",");

15. int age = scanner.nextInt();

What is the result?

A. Compilation fails.
B. After line 15, the value of age is 5.
C. After line 15, the value of age is 3.
D. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 167

Given:

```
1. 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?

A. 0
B. 1
C. 2
D. 3
E. 4
F. Compilation fails.
G. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 168

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.

Answer: A,C
Explanation:

QUESTION NO: 169

Given:

1. import java.util.*;

2. public class Example {

3. public static void main(String[] args) {

4. // insert code here

5. set.add(new Integer(2));

6. set.add(new Integer(1));

7. System.out.println(set);

8. }

9. }

Which code, inserted at line 4, guarantees that this program will output [1, 2]?

A. Set set = new TreeSet();
B. Set set = new HashSet();
C. Set set = new SortedSet();
D. List set = new SortedList();
E. Set set = new LinkedHashSet();

Answer: A
Explanation:

QUESTION NO: 170

Given:

11. public class Person {

12. private name;

13. public Person(String name) {

```
14. this.name = name;

15. }

16. public int hashCode() {

17. return 420;

18. }

19. }
```

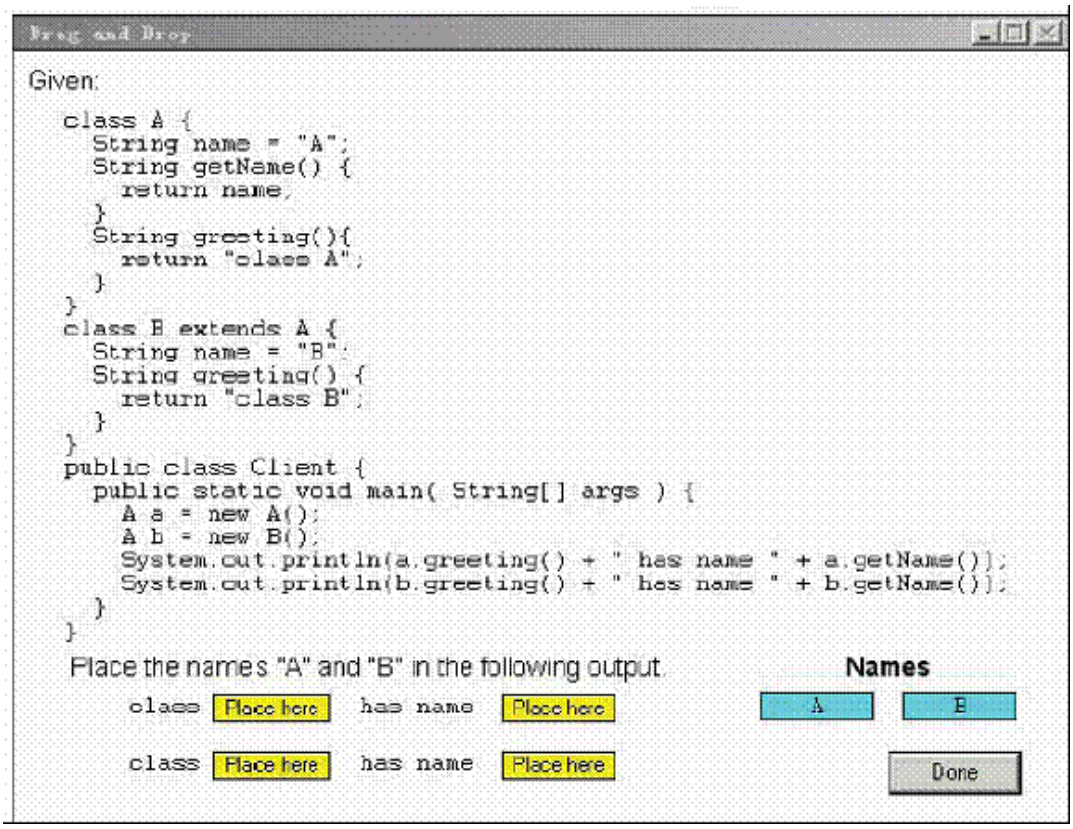
Which statement is true?

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.

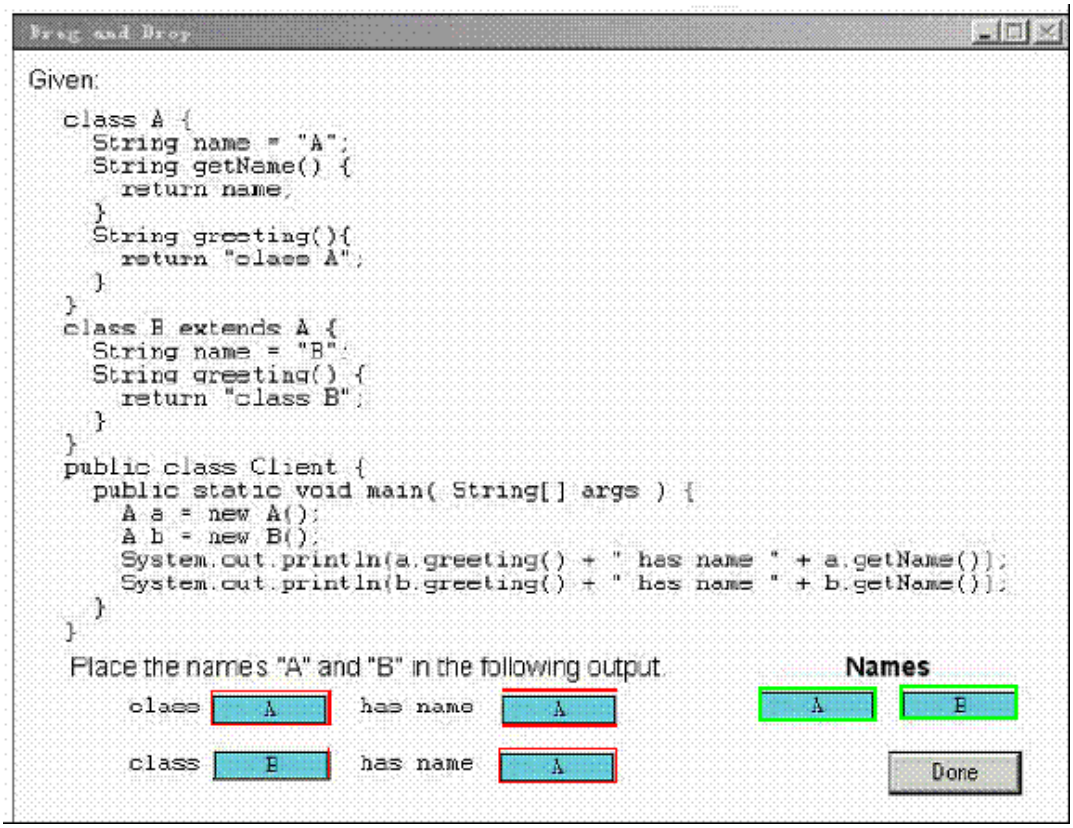
Answer: A
Explanation:

QUESTION NO: 171 DRAG DROP

Click the Task button.



Answer:



QUESTION NO: 172 DRAG DROP

Click the Task button.

Place the code elements into the class so that the code compiles and prints "Run. Run. doIt." in exactly that order. Note that there may be more than one correct solution.

```
public class TesTwo extends Thread {
 public static void main (String[] a) throws Exception {
    TesTwo t = new TesTwo();
    t.start();
    [Place here]
    [Place here]
  } [Place here]
  public void run() {
    System.out.print("Run. ");
  }
  public void doIt() {
    System.out.print("doIt. ");
  }
}
```

Code Elements

t.start(); t.join(); t.pause(10); run(); t.run(); t.doIt(); doIt(); Done

Answer:

Place the code elements into the class so that the code compiles and prints "Run. Run. doIt." in exactly that order. Note that there may be more than one correct solution.

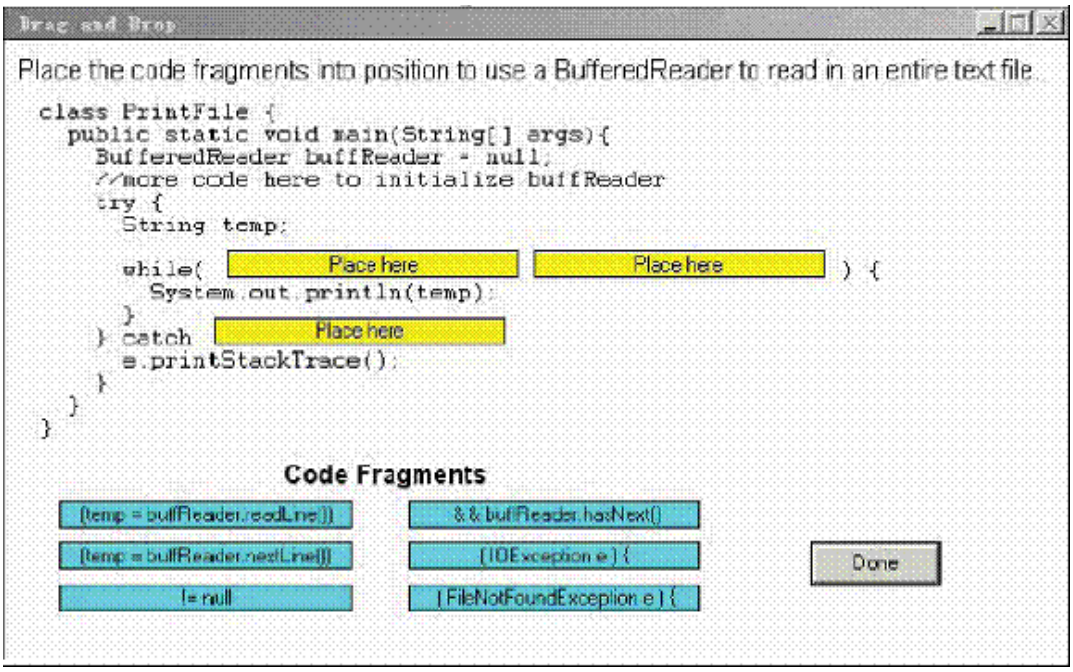
```
public class TesTwo extends Thread {
 public static void main (String[] a) throws Exception {
    TesTwo t = new TesTwo();
    t.start();
    t.join();
    t.run();
  } t.doIt();
  public void run() {
    System.out.print("Run. ");
  }
  public void doIt() {
    System.out.print("doIt. ");
  }
}
```

Code Elements

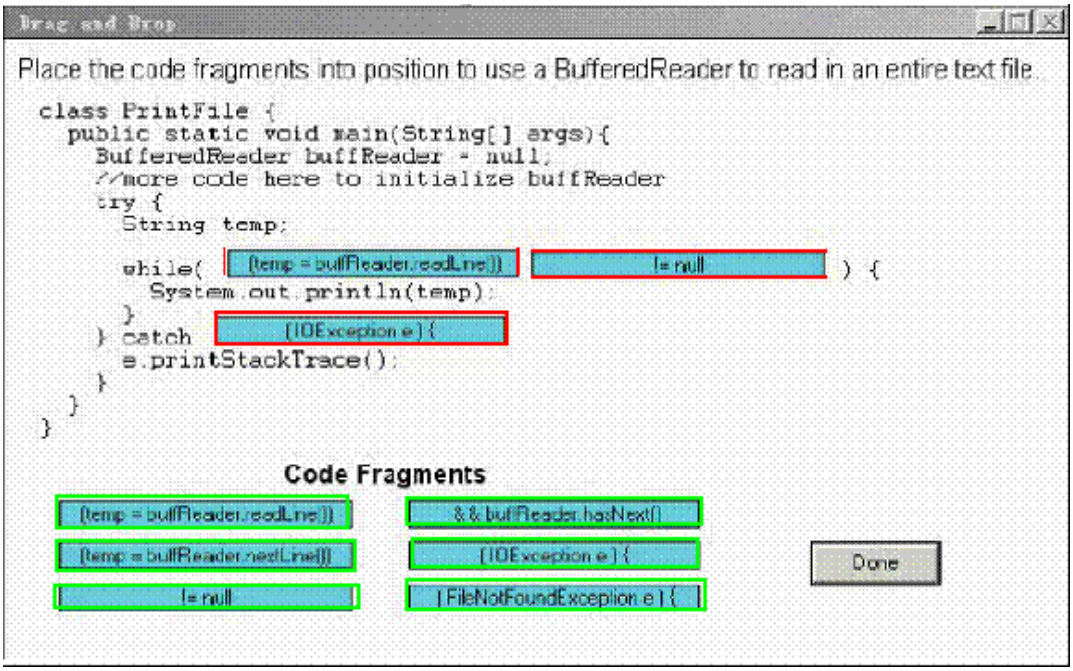
t.start(); t.join(); t.pause(10); run(); t.run(); t.doIt(); doIt(); Done

QUESTION NO: 173 DRAG DROP

Click the Task button.

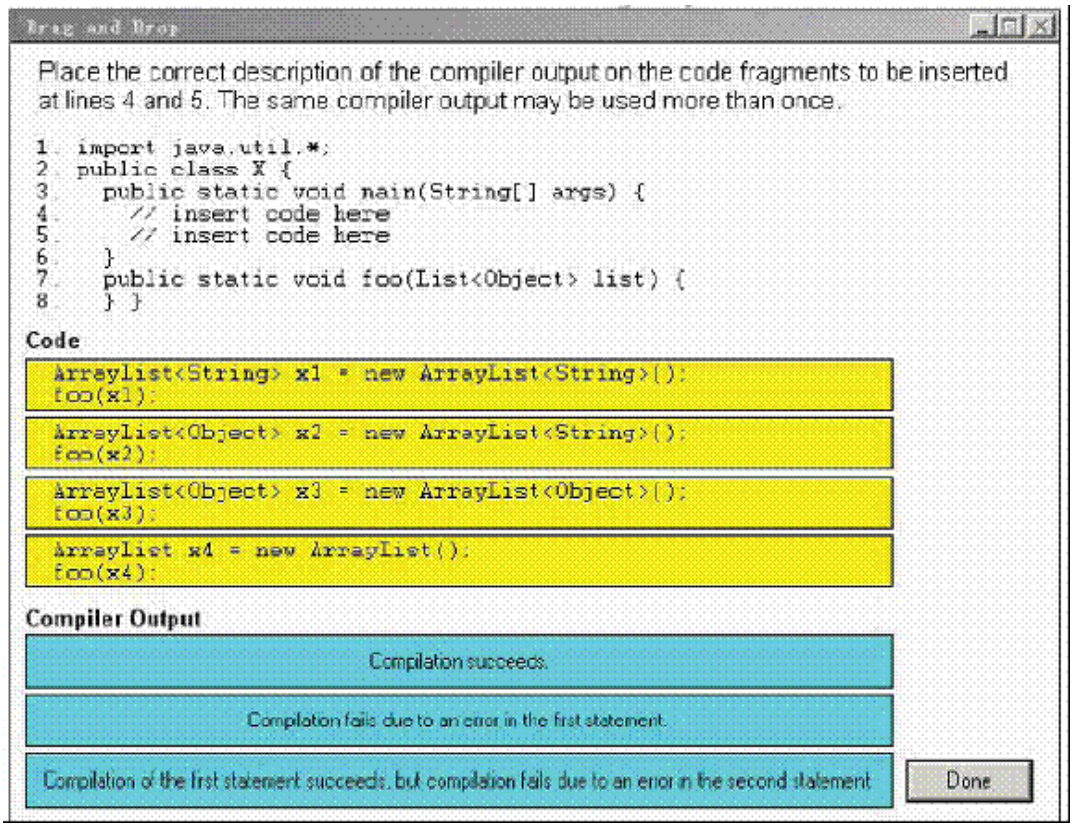


Answer:

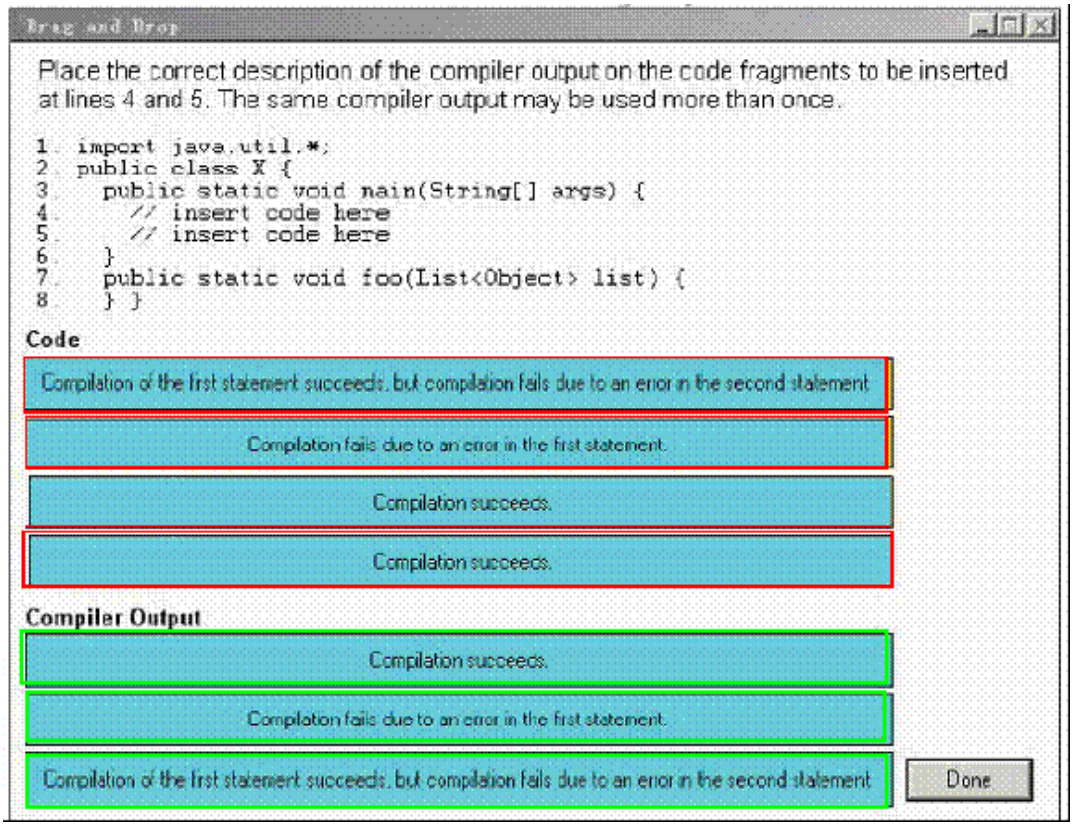


QUESTION NO: 174 DRAG DROP

Click the Task button.

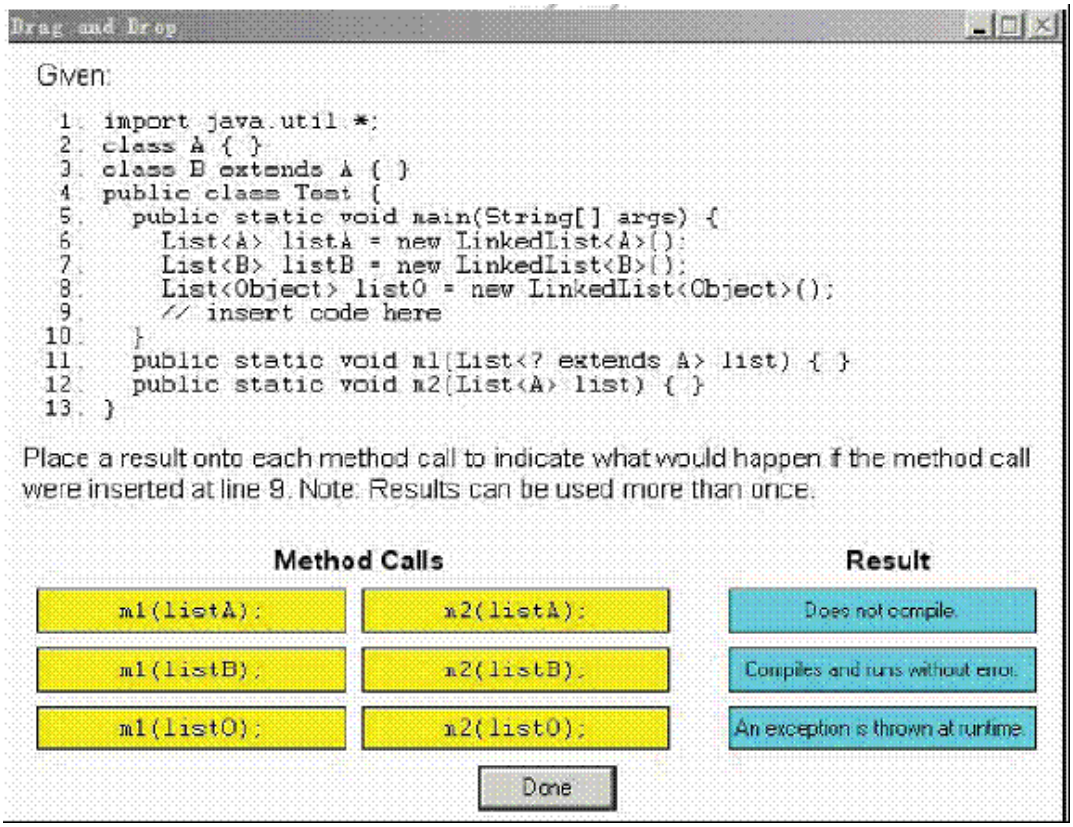


Answer:

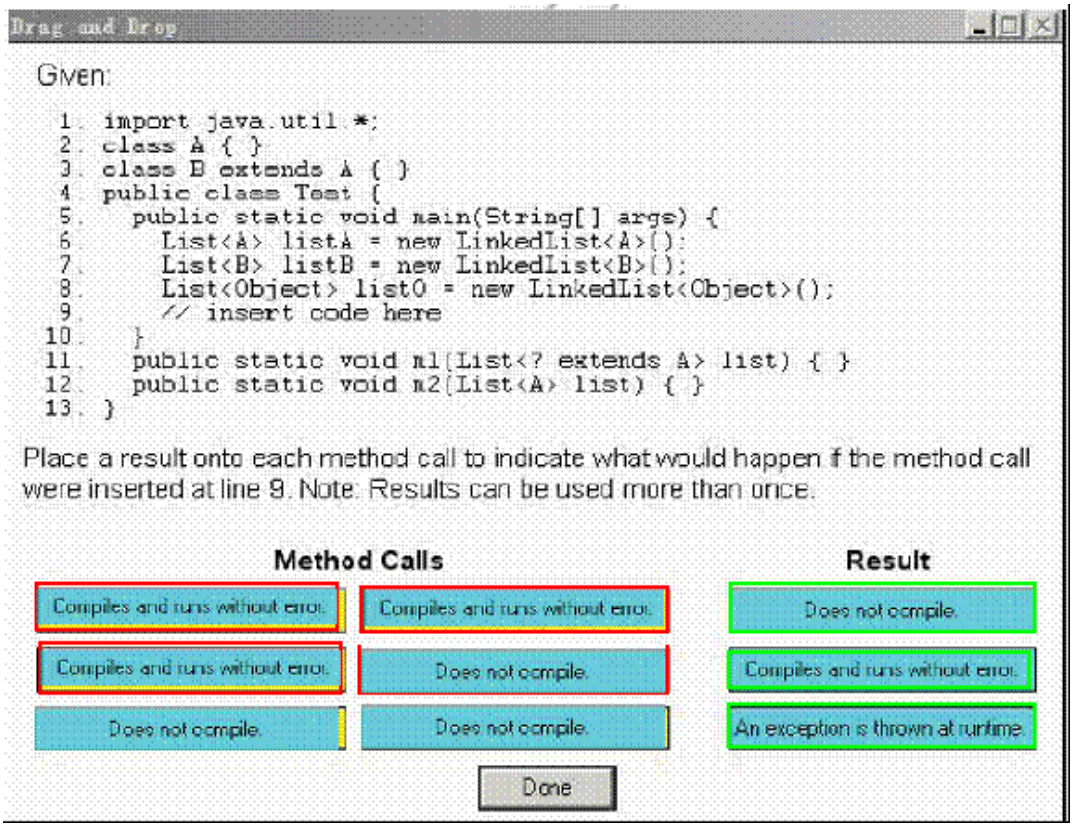


QUESTION NO: 175 DRAG DROP

Click the Task button.

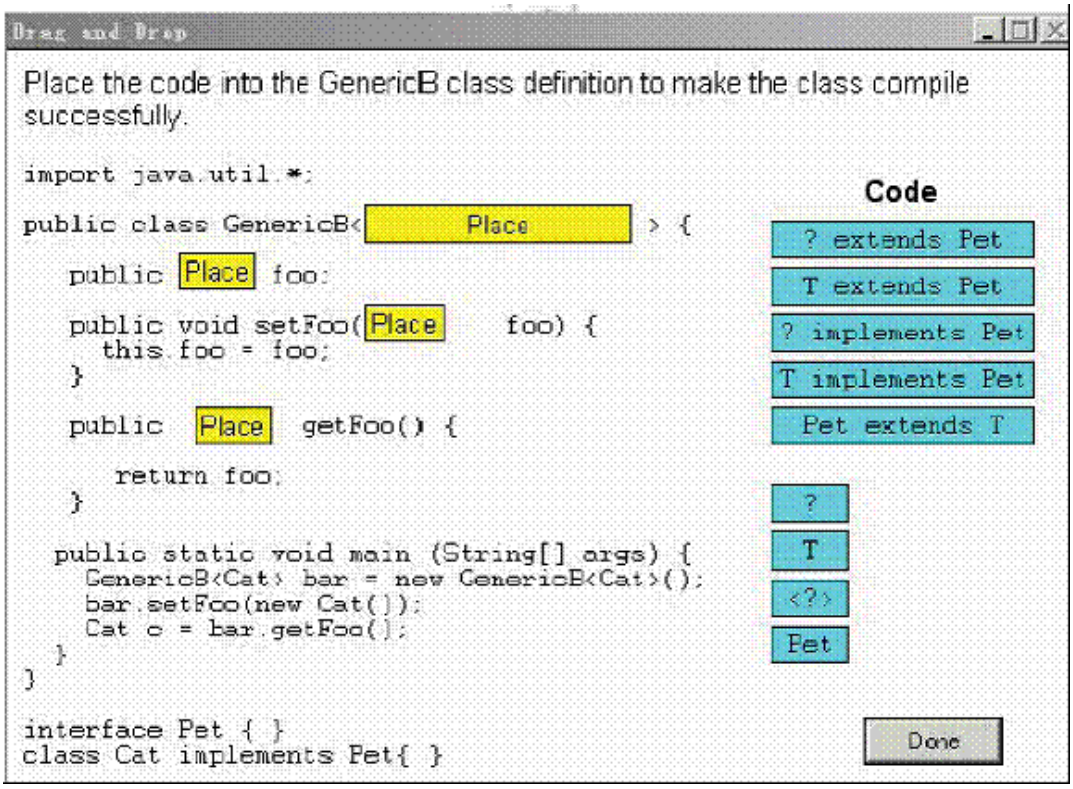


Answer:

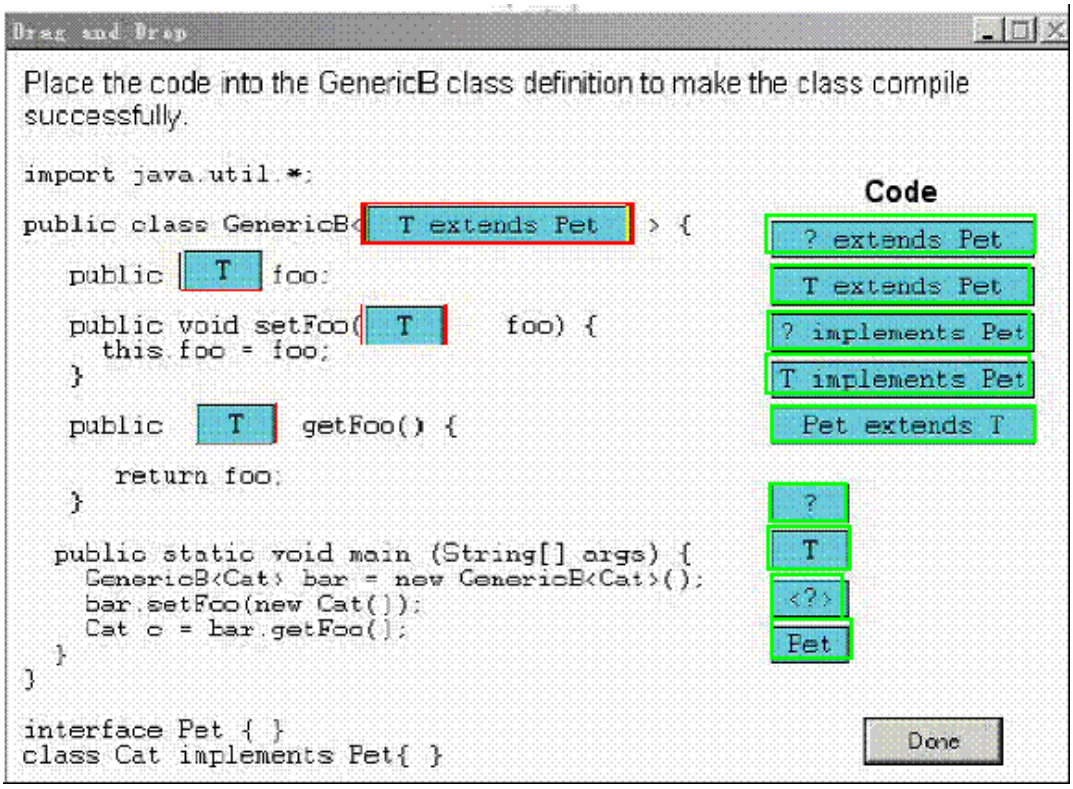


QUESTION NO: 176 DRAG DROP

Click the Task button.



Answer:



QUESTION NO: 177

Given:

1. class TestException extends Exception { }

2. class A {

3. public String sayHello(String name) throws TestException {

4. if(name == null) throw new TestException();

5. return "Hello " + name;

6. }

7. }

8. public class TestA {

9. public static void main(String[] args) {

10. new A().sayHello("Aiko");

11. }

12. }

Which statement is true?

A. Compilation succeeds.
B. Class A does not compile.
C. The method declared on line 9 cannot be modified to throw TestException.
D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException.

Answer: D
Explanation:

QUESTION NO: 178

Given:

11. public static void main(String[] args) {

12. for (int i = 0; i <= 10; i++) {

13. if (i > 6) break;

14. }

15. System.out.println(i);

16. }

What is the result?

A. 6
B. 7
C. 10
D. 11
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: E
Explanation:

QUESTION NO: 179

Given:

3. public class Breaker {

4. static String o = "";

5. public static void main(String[] args) {

6. z:

7. o = o + 2;

8. for(int x = 3; x < 8; x++) {

9. if(x==4) break;

10. if(x==6) break z;

11. o = o + x;

12. }

13. System.out.println(o);

14. }

15. }

What is the result?

A. 23
B. 234
C. 235
D. 2345
E. 2357
F. 23457
G. Compilation fails.

Answer: G
Explanation:

QUESTION NO: 180

Given:

5. class A {

6. void foo() throws Exception { throw new Exception(); }

7. }

8. class SubB2 extends A {

9. void foo() { System.out.println("B "); }

10. }

11. class Tester {

12. public static void main(String[] args) {

13. A a = new SubB2();

14. a.foo();

15. }

16. }

What is the result?

A. B
B. B, followed by an Exception.

C. Compilation fails due to an error on line 9.
D. Compilation fails due to an error on line 14.
E. An Exception is thrown with no other output.

Answer: D
Explanation:

QUESTION NO: 181

Given:

```
11. public static void main(String[] args) {
12. String str = "null";
13. if (str == null) {
14. System.out.println("null");
15. } else (str.length() == 0) {
16. System.out.println("zero");
17. } else {
18. System.out.println("some");
19. }
20. }
```

What is the result?

A. null
B. zero
C. some
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 182

Given:

```
1. public class Mule {
2. public static void main(String[] args) {
3. boolean assert = true;
4. if(assert) {
5. System.out.println("assert is true");
6. }
7. }
8. }
```

Which command-line invocations will compile?

A. javac Mule.java
B. javac -source 1.3 Mule.java
C. javac -source 1.4 Mule.java
D. javac -source 1.5 Mule.java

Answer: B
Explanation:

QUESTION NO: 183

Given:

```
11. static void test() {
12. try {
13. String x = null;
14. System.out.print(x.toString() + " ");
15. }
16. finally { System.out.print("finally "); }
17. }
18. public static void main(String[] args) {
19. try { test(); }
20. catch (Exception ex) { System.out.print("exception "); }
```

21. }

What is the result?

A. null
B. finally
C. null finally
D. Compilation fails.
E. finally exception

Answer: E
Explanation:

QUESTION NO: 184

Given:

1. public class Boxer1{

2. Integer i;

3. int x;

4. public Boxer1(int y) {

5. x = i+y;

6. System.out.println(x);

7. }

8. public static void main(String[] args) {

9. new Boxer1(new Integer(4));

10. }

11. }

What is the result?

A. The value "4" is printed at the command line.
B. Compilation fails because of an error in line 5.
C. Compilation fails because of an error in line 9.
D. A NullPointerException occurs at runtime.
E. A NumberFormatException occurs at runtime.
F. An IllegalStateException occurs at runtime.

Answer: D
Explanation:

QUESTION NO: 185

Which two code fragments are most likely to cause a StackOverflowError? (Choose two.)

A. int []x = {1,2,3,4,5};
for(int y = 0; y < 6; y++)
System.out.println(x[y]);
B. static int[] x = {7,6,5,4};
static { x[1] = 8;
x[4] = 3; }
C. for(int y = 10; y < 10; y++)
doStuff(y);
D. void doOne(int x) { doTwo(x); }
void doTwo(int y) { doThree(y); }
void doThree(int z) { doTwo(z); }
E. for(int x = 0; x < 1000000000; x++)
doStuff(x);
F. void counter(int i) { counter(++i); }

Answer: D,F
Explanation:

QUESTION NO: 186

Given:

11. static void test() throws RuntimeException {

12. try {

13. System.out.print("test ");

14. throw new RuntimeException();

15. }

16. catch (Exception ex) { System.out.print("exception "); }

17. }

18. public static void main(String[] args) {

19. try { test(); }

20. catch (RuntimeException ex) { System.out.print("runtime "); }

21. System.out.print("end ");

22. }

What is the result?

A. test end
B. Compilation fails.
C. test runtime end
D. test exception end
E. A Throwable is thrown by main at runtime.

Answer: D
Explanation:

QUESTION NO: 187

Given:

11. public static void main(String[] args) {

12. Integer i = new Integer(1) + new Integer(2);

13. switch(i) {

14. case 3: System.out.println("three"); break;

15. default: System.out.println("other"); break;

16. }

17. }

What is the result?

A. three
B. other
C. An exception is thrown at runtime.
D. Compilation fails because of an error on line 12.
E. Compilation fails because of an error on line 13.
F. Compilation fails because of an error on line 15.

Answer: A

Explanation:

QUESTION NO: 188

Given:

```
21. class Money {
22. private String country = "Canada";
23. public String getC() { return country; }
24. }
25. class Yen extends Money {
26. public String getC() { return super.country; }
27. }
28. public class Euro extends Money {
29. public String getC(int x) { return super.getC(); }
30. public static void main(String[] args) {
31. System.out.print(new Yen().getC() + " " + new Euro().getC());
32. }
33. }
```

What is the result?

A. Canada
B. null Canada
C. Canada null
D. Canada Canada
E. Compilation fails due to an error on line 26.
F. Compilation fails due to an error on line 29.

Answer: E
Explanation:

QUESTION NO: 189

Given:

11. class ClassA {}

12. class ClassB extends ClassA {}

13. class ClassC extends ClassA {}

and:

21. ClassA p0 = new ClassA();

22. ClassB p1 = new ClassB();

23. ClassC p2 = new ClassC();

24. ClassA p3 = new ClassB();

25. ClassA p4 = new ClassC();

Which three are valid? (Choose three.)

A. p0 = p1;
B. p1 = p2;
C. p2 = p4;
D. p2 = (ClassC)p1;
E. p1 = (ClassB)p3;
F. p2 = (ClassC)p4;

Answer: A,E,F
Explanation:

QUESTION NO: 190

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.

Answer: B,E,F
Explanation:

QUESTION NO: 191

Given:

10. interface A { void x(); }

11. class B implements A { public void x() {} public void y() {} }

12. class C extends B { public void x() {} }

And:

20. java.util.List<A> list = new java.util.ArrayList<A>();

21. list.add(new B());

22. list.add(new C());

23. for (A a : list) {

24. a.x();

25. a.y();

26. }

What is the result?

A. The code runs with no output.
B. An exception is thrown at runtime.
C. Compilation fails because of an error in line 20.
D. Compilation fails because of an error in line 21.
E. Compilation fails because of an error in line 23.
F. Compilation fails because of an error in line 25.

Answer: F
Explanation:

QUESTION NO: 192

Given:

1. package test;

2.

3. class Target {

4. public String name = "hello";

5. }

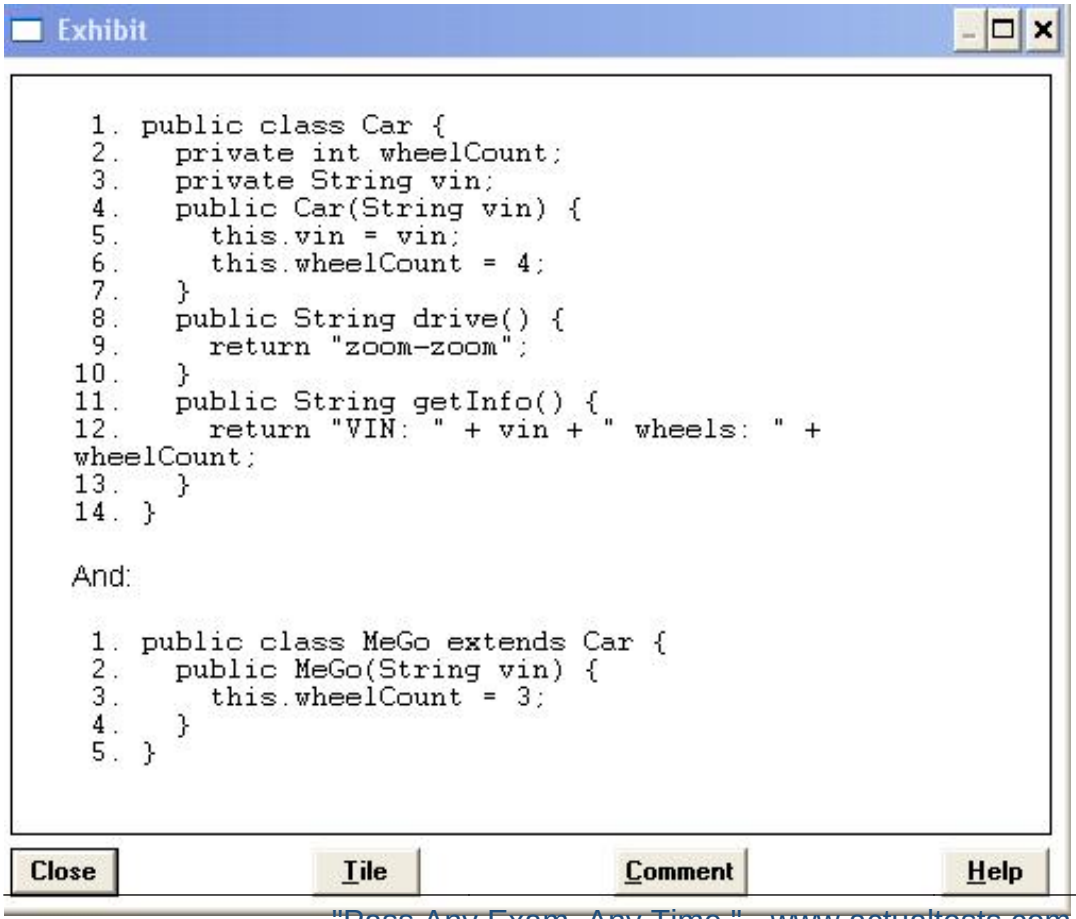
What can directly access and change the value of the variable name?

A. any class
B. only the Target class
C. any class in the test package
D. any class that extends Target

Answer: C
Explanation:

QUESTION NO: 193

Click the Exhibit button. What two must the programmer do to correct the compilation errors? (Choose two.)



A. insert a call to this() in the Car constructor
B. insert a call to this() in the MeGo constructor
C. insert a call to super() in the MeGo constructor
D. insert a call to super(vin) in the MeGo constructor
E. change the wheelCount variable in Car to protected
F. change line 3 in the MeGo class to super.wheelCount = 3;

Answer: D,E
Explanation:

QUESTION NO: 194

A team of programmers is involved in reviewing a proposed design for a new utility class. After some discussion, they realize that the current design allows other classes to access methods in the utility class that should be accessible only to methods within the utility class itself. What design issue has the team discovered?

A. Tight coupling
B. Low cohesion
C. High cohesion
D. Loose coupling
E. Weak encapsulation
F. Strong encapsulation

Answer: E
Explanation:

QUESTION NO: 195

Given:

```
5. class Thingy { Meter m = new Meter(); }
6. class Component { void go() { System.out.print("c"); } }
7. class Meter extends Component { void go() { System.out.print("m"); } }
8.
9. class DeluxeThingy extends Thingy {
10. public static void main(String[] args) {
11. DeluxeThingy dt = new DeluxeThingy();
```

12. dt.m.go();

13. Thingy t = new DeluxeThingy();

14. t.m.go();

15. }

16. }

Which two are true? (Choose two.)

A. The output is mm.
B. The output is mc.
C. Component is-a Meter.
D. Component has-a Meter.
E. DeluxeThingy is-a Component.
F. DeluxeThingy has-a Component.

Answer: A,F
Explanation:

QUESTION NO: 196

Given:

10. interface Jumper { public void jump(); } ...

20. class Animal {} ...

30. class Dog extends Animal {

31. Tail tail; 32. } ...

40. class Beagle extends Dog implements Jumper{

41. public void jump() {}

42. } ...

50. class Cat implements Jumper{

51. public void jump() {}

52. }

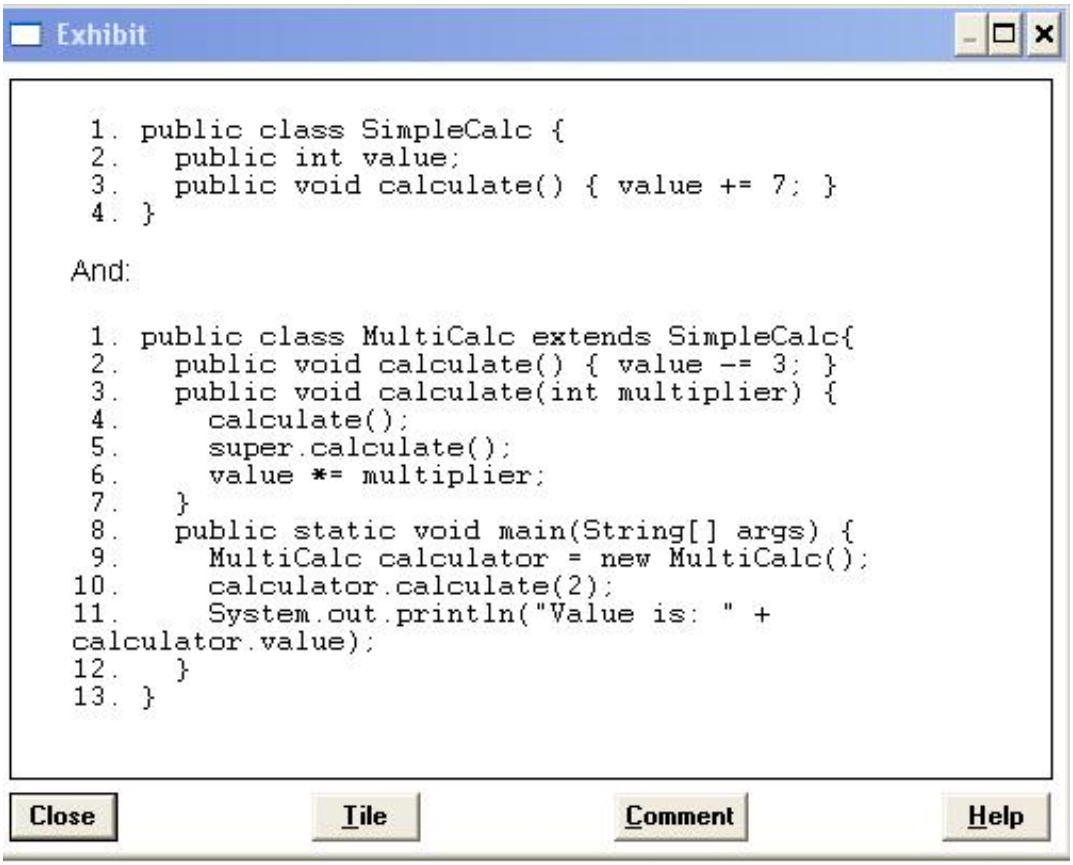
Which three are true? (Choose three.)

A. Cat is-a Animal
B. Cat is-a Jumper
C. Dog is-a Animal
D. Dog is-a Jumper
E. Cat has-a Animal
F. Beagle has-a Tail
G. Beagle has-a Jumper

Answer: B,C,F
Explanation:

QUESTION NO: 197

Click the Exhibit button. What is the result?



A. Value is: 8
B. Compilation fails.
C. Value is: 12
D. Value is: -12
E. The code runs with no output.
F. An exception is thrown at runtime.

Answer: A

Explanation:

QUESTION NO: 198

Given a valid DateFormat object named df, and

16. Date d = new Date(0L);

17. String ds = "December 15, 2004";

18. // insert code here What updates d's value with the date represented by ds?

A. 18. d = df.parse(ds);
B. 18. d = df.getDate(ds);
C. 18. try {
19. d = df.parse(ds);
20. } catch(ParseException e) { };
D. 18. try {
19. d = df.getDate(ds);
20. } catch(ParseException e) { };

Answer: C
Explanation:

QUESTION NO: 199

Which two scenarios are NOT safe to replace a StringBuffer object with a StringBuilder object? (Choose two.)

A. When using versions of Java technology earlier than 5.0.
B. When sharing a StringBuffer among multiple threads.
C. When using the java.io class StringBufferInputStream.
D. When you plan to reuse the StringBuffer to build more than one string.

Answer: A,B
Explanation:

QUESTION NO: 200

Given:

11. String test = "a1b2c3";

12. String[] tokens = test.split("\\d");

13. for(String s: tokens) System.out.print(s + " ");

What is the result?

A. a b c
B. 1 2 3
C. a1b2c3
D. a1 b2 c3
E. Compilation fails.
F. The code runs with no output.
G. An exception is thrown at runtime.

Answer: A

QUESTION NO: 201

Given:

1. public class TestString3 {

2. public static void main(String[] args) {

3. // insert code here

5. System.out.println(s);

6. }

7. }

Which two code fragments, inserted independently at line 3, generate the output 4247? (Choose two.)

A. String s = "123456789";
s = (s-"123").replace(1,3,"24") - "89";
B. StringBuffer s = new StringBuffer("123456789");
C. delete(0,3).replace(1,3,"24").delete(4,6);
D. StringBuffer s = new StringBuffer("123456789");
E. substring(3,6).delete(1,3).insert(1, "24");
F. StringBuilder s = new StringBuilder("123456789");
G. substring(3,6).delete(1,2).insert(1, "24");
H. StringBuilder s = new StringBuilder("123456789");

I. delete(0,3).delete(1,3).delete(2,5).insert(1, "24");

Answer: B,E

Explanation:

QUESTION NO: 202

Given:

11. String test = "Test A. Test B. Test C.";

12. // insert code here

13. String[] result = test.split(regex);

Which regular expression, inserted at line 12, correctly splits test into "Test A", "Test B", and "Test C"?

A. String regex = "";
B. String regex = " ";
C. String regex = ".*";
D. String regex = "\\s";
E. String regex = "\\.\\s*";
F. String regex = "\\w[\.] +";

Answer: E

Explanation:

QUESTION NO: 203

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.

Answer: C

Explanation:

QUESTION NO: 204

Given:

11. public class ItemTest {

12. private final int id;

13. public ItemTest(int id) { this.id = id; }

14. public void updateId(int newId) { id = newId; }

15.

16. public static void main(String[] args) {

17. ItemTest fa = new ItemTest(42);

18. fa.updateId(69);

19. System.out.println(fa.id);

20. }

21. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The attribute id in the ItemTest object remains unchanged.
D. The attribute id in the ItemTest object is modified to the new value.
E. A new ItemTest object is created with the preferred value in the id attribute.

Answer: A
Explanation:

QUESTION NO: 205

Given:

11. interface DeclareStuff {

12. public static final int EASY = 3;

13. void doStuff(int t); }

14. public class TestDeclare implements DeclareStuff {

```
15. public static void main(String [] args) {
16. int x = 5;
17. new TestDeclare().doStuff(++x);
18. }
19. void doStuff(int s) {
20. s += EASY + ++s;
21. System.out.println("s " + s);
22. }
23. }
```

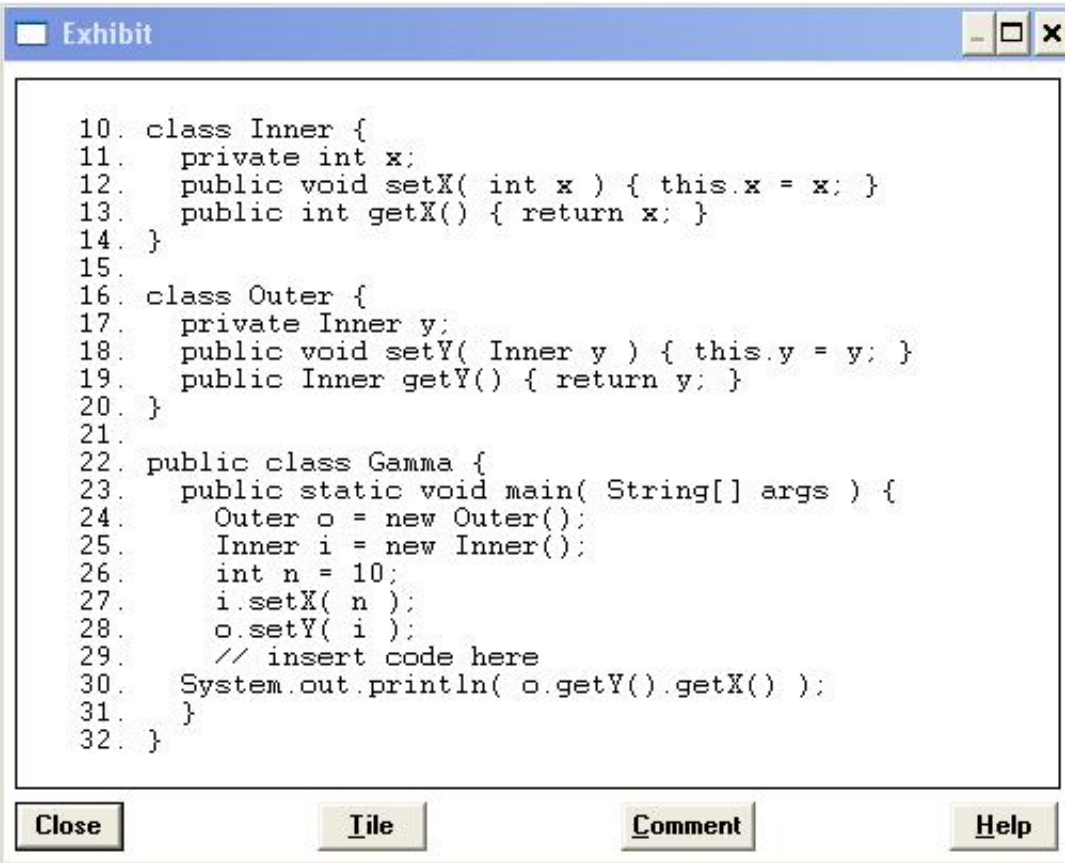
What is the result?

A. s 14
B. s 16
C. s 10
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 206

Click the Exhibit button. Which three code fragments, added individually at line 29, produce the output 100? (Choose three.)



A. n = 100;
B. i.setX(100);
C. o.getY().setX(100);
D. i = new Inner(); i.setX(100);
E. o.setY(i); i = new Inner(); i.setX(100);
F. i = new Inner(); i.setX(100); o.setY(i);

Answer: B,C,F
Explanation:

QUESTION NO: 207

Given:

11. public class Commander {

12. public static void main(String[] args) {

13. String myProp = /* insert code here */

14. System.out.println(myProp);

15. }

16. }

and the command line:

java -Dprop.custom=gobstopper Commander Which two, placed on line 13, will produce the output gobstopper? (Choose two.)

A. System.load("prop.custom");
B. System.getenv("prop.custom");
C. System.property("prop.custom");
D. System.getProperty("prop.custom");
E. System.getProperties().getProperty("prop.custom");

Answer: D,E
Explanation:

QUESTION NO: 208

Given:

1. interface DoStuff2 {

2. float getRange(int low, int high); }

3.

4. interface DoMore {

5. float getAvg(int a, int b, int c); }

6.

7. abstract class DoAbstract implements DoStuff2, DoMore { }

8.

9. class DoStuff implements DoStuff2 {

10. public float getRange(int x, int y) { return 3.14f; } }

11.

12. interface DoAll extends DoMore {

13. float getAvg(int a, int b, int c, int d); }

What is the result?

A. The file will compile without error.
B. Compilation fails. Only line 7 contains an error.
C. Compilation fails. Only line 12 contains an error.
D. Compilation fails. Only line 13 contains an error.
E. Compilation fails. Only lines 7 and 12 contain errors.
F. Compilation fails. Only lines 7 and 13 contain errors.
G. Compilation fails. Lines 7, 12, and 13 contain errors.

Answer: A
Explanation:

QUESTION NO: 209

Given:

```
3. interface Fish { }
4. class Perch implements Fish { }
5. class Walleye extends Perch { }
6. class Bluegill { }
7. public class Fisherman {
8. public static void main(String[] args) {
9. Fish f = new Walleye();
10. Walleye w = new Walleye();
11. Bluegill b = new Bluegill();
12. if(f instanceof Perch) System.out.print("f-p ");
13. if(w instanceof Fish) System.out.print("w-f ");
14. if(b instanceof Fish) System.out.print("b-f ");
15. }
16. }
```

What is the result?

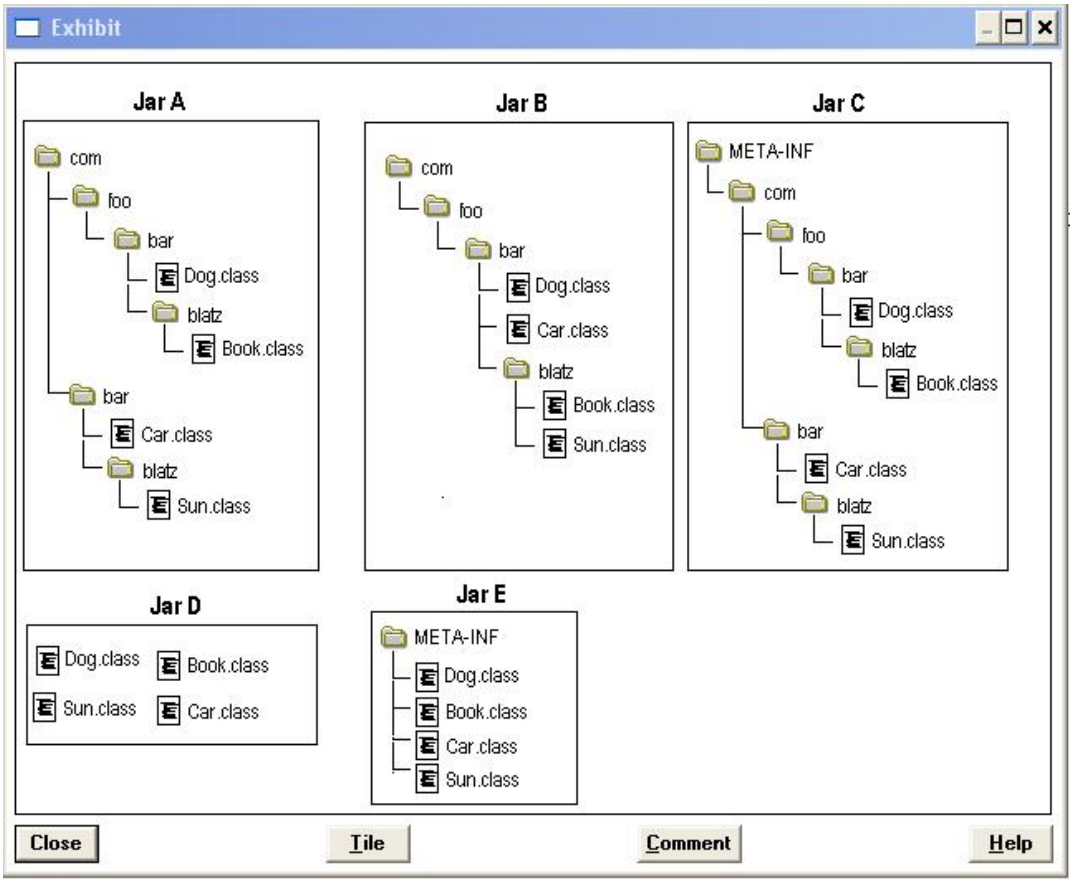
A. w-f
B. f-p w-f
C. w-f b-f

D. f-p w-f b-f
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 210

Click the Exhibit button. Given the fully-qualified class names: com.foo.bar.Dog com.foo.bar.blatz.Book com.bar.Car com.bar.blatz.Sun Which graph represents the correct directory structure for a JAR file from which those classes can be used by the compiler and JVM?



A. Jar A
B. Jar B
C. Jar C
D. Jar D
E. Jar E

Answer: A
Explanation:

QUESTION NO: 211

Given:

1. package com.company.application;

2.

3. public class MainClass {

4. public static void main(String[] args) {}

5. }

And MainClass exists in the /apps/com/company/application directory. Assume the CLASSPATH environment variable is set to "." (current directory). Which two java commands entered at the command line will run MainClass? (Choose two.)

A. java MainClass if run from the /apps directory
B. java com.company.application.MainClass if run from the /apps directory
C. java -classpath /apps com.company.application.MainClass if run from any directory
D. java -classpath . MainClass if run from the /apps/com/company/application directory
E. java -classpath /apps/com/company/application:. MainClass if run from the /apps directory
F. java com.company.application.MainClass if run from the /apps/com/company/application directory

Answer: B,C
Explanation:

QUESTION NO: 212

Given:

12. import java.util.*;

13. public class Explorer2 {

14. public static void main(String[] args) {

15. TreeSet<Integer> s = new TreeSet<Integer>();

16. TreeSet<Integer> subs = new TreeSet<Integer>();

17. for(int i = 606; i < 613; i++)

18. if(i%2 == 0) s.add(i);

19. subs = (TreeSet)s.subSet(608, true, 611, true);

20. s.add(629);

21. System.out.println(s + " " + subs);

22. }

23. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. [608, 610, 612, 629] [608, 610]
D. [608, 610, 612, 629] [608, 610, 629]
E. [606, 608, 610, 612, 629] [608, 610]
F. [606, 608, 610, 612, 629] [608, 610, 629]

Answer: E
Explanation:

QUESTION NO: 213

Given that the elements of a PriorityQueue are ordered according to natural ordering, and:

2. import java.util.*;

3. public class GetInLine {

4. public static void main(String[] args) {

5. PriorityQueue<String> pq = new PriorityQueue<String>();

6. pq.add("banana");

7. pq.add("pear");

8. pq.add("apple");

9. System.out.println(pq.poll() + " " + pq.peek());

10. }

11. }

What is the result?

A. apple pear
B. banana pear
C. apple apple
D. apple banana
E. banana banana

Answer: D
Explanation:

QUESTION NO: 214

Given a pre-generics implementation of a method:

11. public static int sum(List list) {

12. int sum = 0;

13. for (Iterator iter = list.iterator(); iter.hasNext();) {

14. int i = ((Integer)iter.next()).intValue();

15. sum += i;

16. }

17. return sum;

18. }

What three changes allow the class to be used with generics and avoid an unchecked warning? (Choose three.)

A. Remove line 14.
B. Replace line 14 with "int i = iter.next();".
C. Replace line 13 with "for (int i : intList) {".
D. Replace line 13 with "for (Iterator iter : intList) {".
E. Replace the method declaration with "sum(List<int> intList)".
F. Replace the method declaration with "sum(List<Integer> intList)".

Answer: A,C,F
Explanation:

QUESTION NO: 215

Given:

34. HashMap props = new HashMap();

35. props.put("key45", "some value");

36. props.put("key12", "some other value");

37. props.put("key39", "yet another value");

38. Set s = props.keySet();

39. // insert code here What, inserted at line 39, will sort the keys in the props HashMap?

A. Arrays.sort(s);
B. s = new TreeSet(s);
C. Collections.sort(s);
D. s = new SortedSet(s);

Answer: B
Explanation:

QUESTION NO: 216

Given:

11. public class Person {

12. private String name;

13. public Person(String name) {

14. this.name = name;

15. }

16. public boolean equals(Object o) {

17. if (! (o instanceof Person)) return false;

18. Person p = (Person) o;

19. return p.name.equals(this.name);

20. }

21. }

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.

Answer: B
Explanation:

QUESTION NO: 217

Given:

3. import java.util.*;

4. public class Hancock {

5. // insert code here

6. list.add("foo");

7. }

8. }

Which two code fragments, inserted independently at line 5, will compile without warnings? (Choose two.)

A. public void addStrings(List list) {
B. public void addStrings(List<String> list) {
C. public void addStrings(List<? super String> list) {
D. public void addStrings(List<? extends String> list) {

Answer: B,C
Explanation:

QUESTION NO: 218

Given:

1. public class Threads4 {

2. public static void main (String[] args) {

3. new Threads4().go();

4. }

5. public void go() {

6. Runnable r = new Runnable() {

7. public void run() {

8. System.out.print("foo");

9. }

10. };

11. Thread t = new Thread(r);

12. t.start();

13. t.start();

14. }

15. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "foo".
D. The code executes normally, but nothing is printed.

Answer: B
Explanation:

QUESTION NO: 219

Given:

1. public class TestOne {

2. public static void main (String[] args) throws Exception {

3. Thread.sleep(3000);

4. System.out.println("sleep");

5. }

6. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "sleep".
D. The code executes normally, but nothing is printed.

Answer: C
Explanation:

QUESTION NO: 220

Given:

1. public class TestSeven extends Thread {

2. private static int x;

3. public synchronized void doThings() {

4. int current = x;

5. current++;

6. x = current;

7. }

8. public void run() {

9. doThings();

10. }

11.}

Which statement is true?

A. Compilation fails.
B. An exception is thrown at runtime.
C. Synchronizing the run() method would make the class thread-safe.
D. The data in variable "x" are protected from concurrent access problems.
E. Declaring the doThings() method as static would make the class thread-safe.

F. Wrapping the statements within doThings() in a synchronized(new Object()) { } block would make the class thread-safe.

Answer: E

Explanation:

QUESTION NO: 221

Which two code fragments will execute the method doStuff() in a separate thread? (Choose two.)

A. new Thread() {
public void run() { doStuff(); }
};
B. new Thread() {
public void start() { doStuff(); }
};
C. new Thread() {
public void start() { doStuff(); }
}.run();
D. new Thread() {
public void run() { doStuff(); }
}.start();
E. new Thread(new Runnable() {
public void run() { doStuff(); }
}).run();
F. new Thread(new Runnable() {
public void run() { doStuff(); }
}).start();

Answer: D,F

Explanation:

QUESTION NO: 222

Given:

11. public static void main(String[] args) {

12. Object obj = new int[] { 1, 2, 3 };

13. int[] someArray = (int[])obj;

14. for (int i : someArray) System.out.print(i + " ");

15. }

What is the result?

A. 1 2 3
B. Compilation fails because of an error in line 12.
C. Compilation fails because of an error in line 13.
D. Compilation fails because of an error in line 14.
E. A ClassCastException is thrown at runtime.

Answer: A
Explanation:

QUESTION NO: 223

Given:

10. interface Data { public void load(); }

11. abstract class Info { public abstract void load(); }

Which class correctly uses the Data interface and Info class?

A. public class Employee extends Info implements Data {
public void load() { /*do something*/ }
}
B. public class Employee implements Info extends Data {
public void load() { /*do something*/ }
}
C. public class Employee extends Info implements Data {
public void load(){ /*do something*/ }
public void Info.load(){ /*do something*/ }
}
D. public class Employee implements Info extends Data {
public void Data.load(){ /*do something*/ }
public void load(){ /*do something*/ }
}
E. public class Employee implements Info extends Data {
public void load(){ /*do something*/ }
public void Info.load(){ /*do something*/ }
}
F. public class Employee extends Info implements Data{
public void Data.load() { /*do something*/ }
public void Info.load() { /*do something*/ }
}

Answer: A
Explanation:

QUESTION NO: 224

Given:

```
11. public static void parse(String str) {
12. try {
13. float f = Float.parseFloat(str);
14. } catch (NumberFormatException nfe) {
15. f = 0;
16. } finally {
17. System.out.println(f);
18. }
19. }
20. public static void main(String[] args) {
21. parse("invalid");
22. }
```

What is the result?

A. 0.0
B. Compilation fails.
C. A ParseException is thrown by the parse method at runtime.
D. A NumberFormatException is thrown by the parse method at runtime.

Answer: B
Explanation:

QUESTION NO: 225

Given

11. public interface Status {

12. /* insert code here */ int MY_VALUE = 10;

13. }

Which three are valid on line 12? (Choose three.)

A. final
B. static
C. native
D. public
E. private
F. abstract
G. protected

Answer: A,B,D
Explanation:

QUESTION NO: 226

Given:

1. interface TestA { String toString(); }

2. public class Test {

3. public static void main(String[] args) {

4. System.out.println(new TestA() {

5. public String toString() { return "test"; }

6. });

7. }

8. }

What is the result?

A. test
B. null
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 1.
E. Compilation fails because of an error in line 4.
F. Compilation fails because of an error in line 5.

Answer: A
Explanation:

QUESTION NO: 227

Given:

11. public interface A { public void m1(); }

12.

13. class B implements A { }

14. class C implements A { public void m1() { } }

15. class D implements A { public void m1(int x) { } }

16. abstract class E implements A { }

17. abstract class F implements A { public void m1() { } }

18. abstract class G implements A { public void m1(int x) { } }

What is the result?

A. Compilation succeeds.
B. Exactly one class does NOT compile.
C. Exactly two classes do NOT compile.
D. Exactly four classes do NOT compile.
E. Exactly three classes do NOT compile.

Answer: C
Explanation:

QUESTION NO: 228

Given:

21. abstract class C1 {

22. public C1() { System.out.print(1); }

23. }

24. class C2 extends C1 {

```
25. public C2() { System.out.print(2); }

26. }

27. class C3 extends C2 {

28. public C3() { System.out.println(3); }

29. }

30. public class Ctest {

31. public static void main(String[] a) { new C3(); }

32. }
```

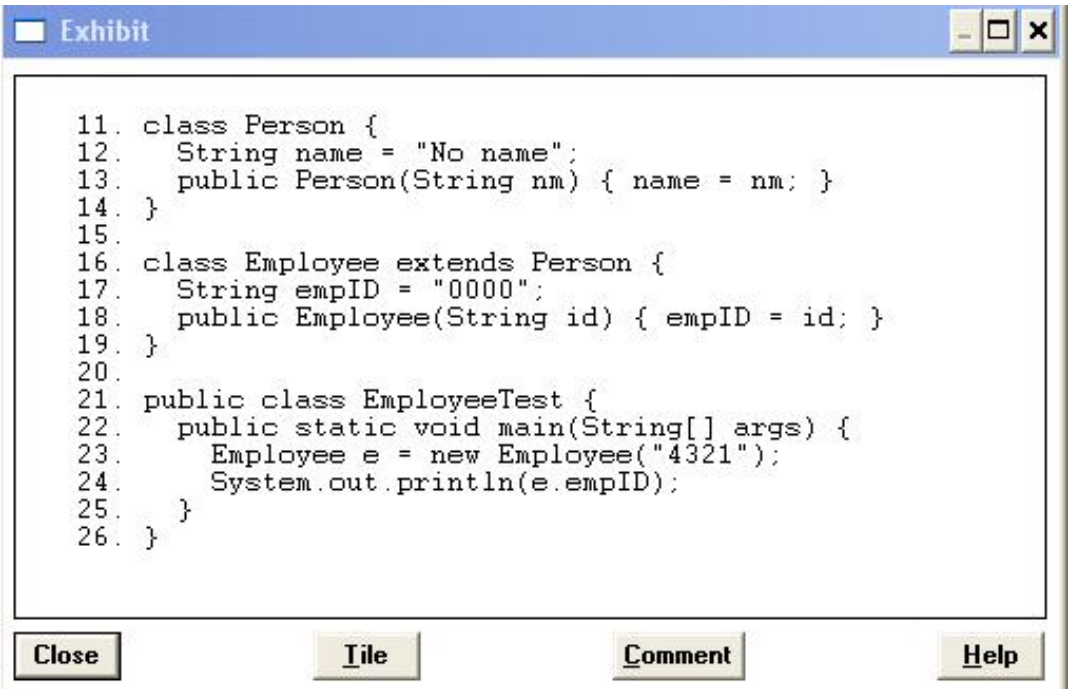
What is the result?

A. 3
B. 23
C. 32
D. 123
E. 321
F. Compilation fails.
G. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 229

Click the Exhibit button. What is the result?



A. 4321
B. 0000
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 18.

Answer: D
Explanation:

QUESTION NO: 230

Given:

10. class One {

11. public One foo() { return this; }

12. }

13. class Two extends One {

14. public One foo() { return this; }

15. }

16. class Three extends Two {

17. // insert method here

18. }

Which two methods, inserted individually, correctly complete the Three class? (Choose two.)

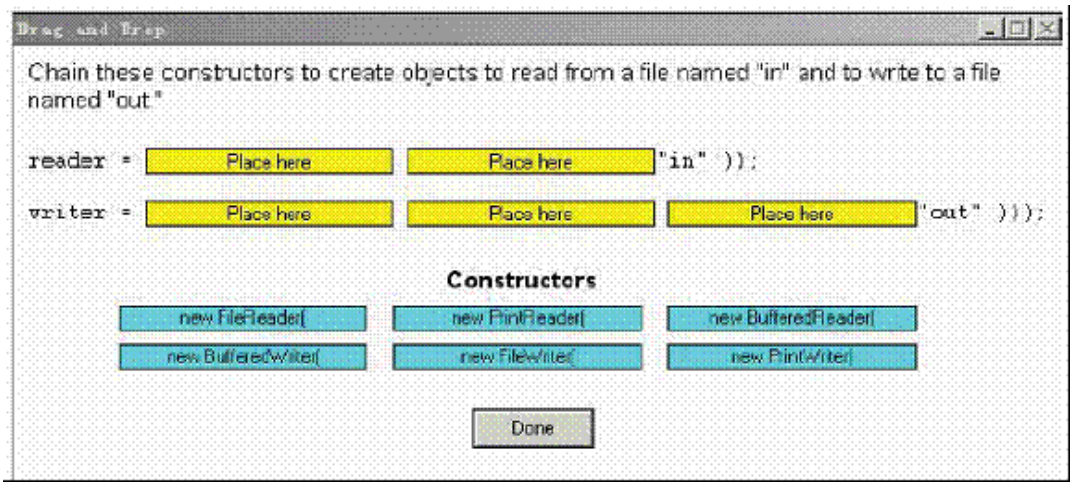
A. public void foo() {}
B. public int foo() { return 3; }
C. public Two foo() { return this; }
D. public One foo() { return this; }
E. public Object foo() { return this; }

Answer: C,D

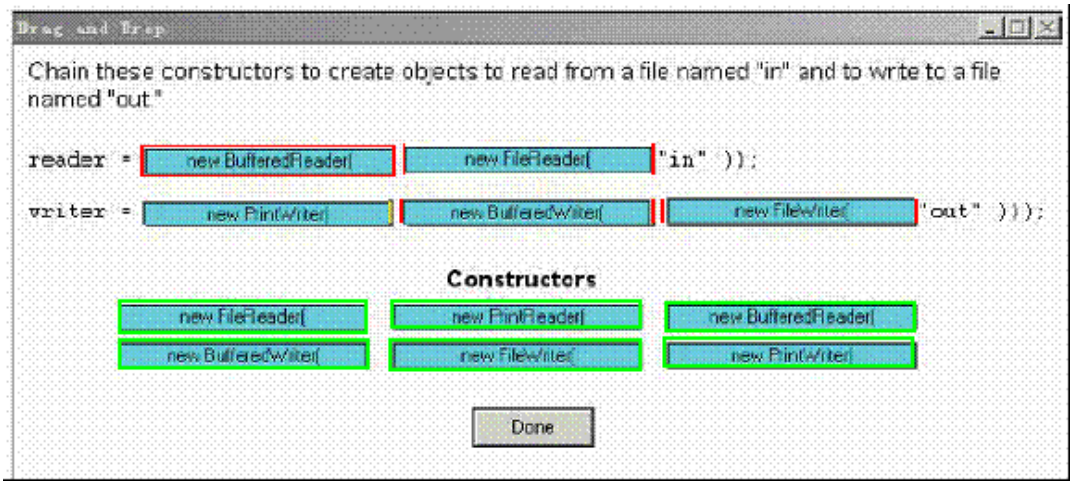
Explanation:

QUESTION NO: 231 DRAG DROP

Click the Task button.

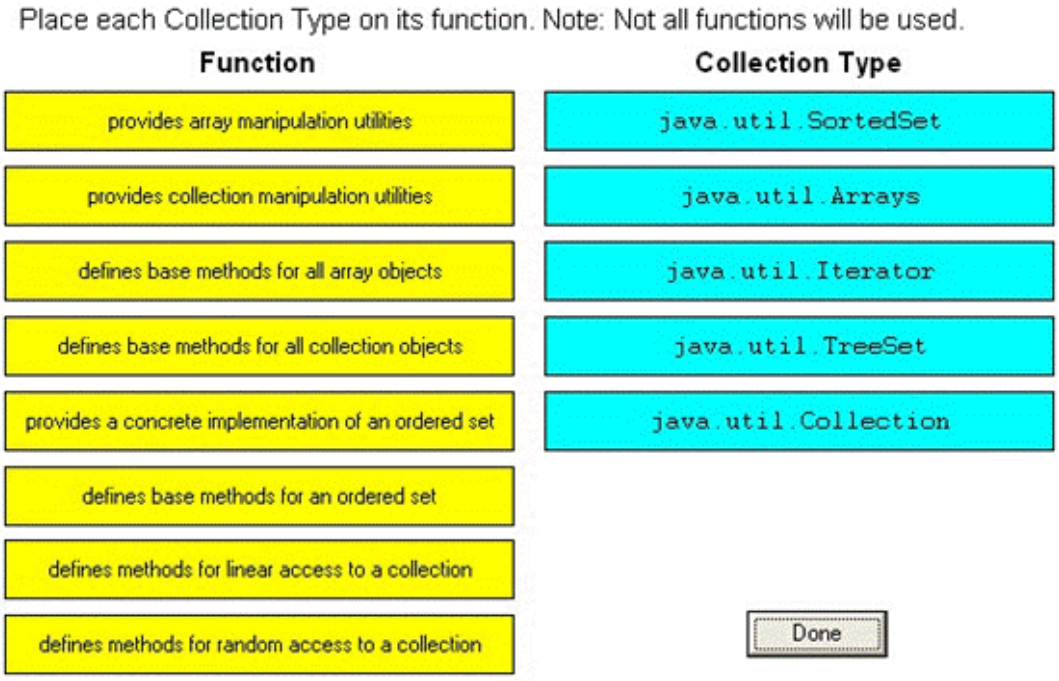


Answer:

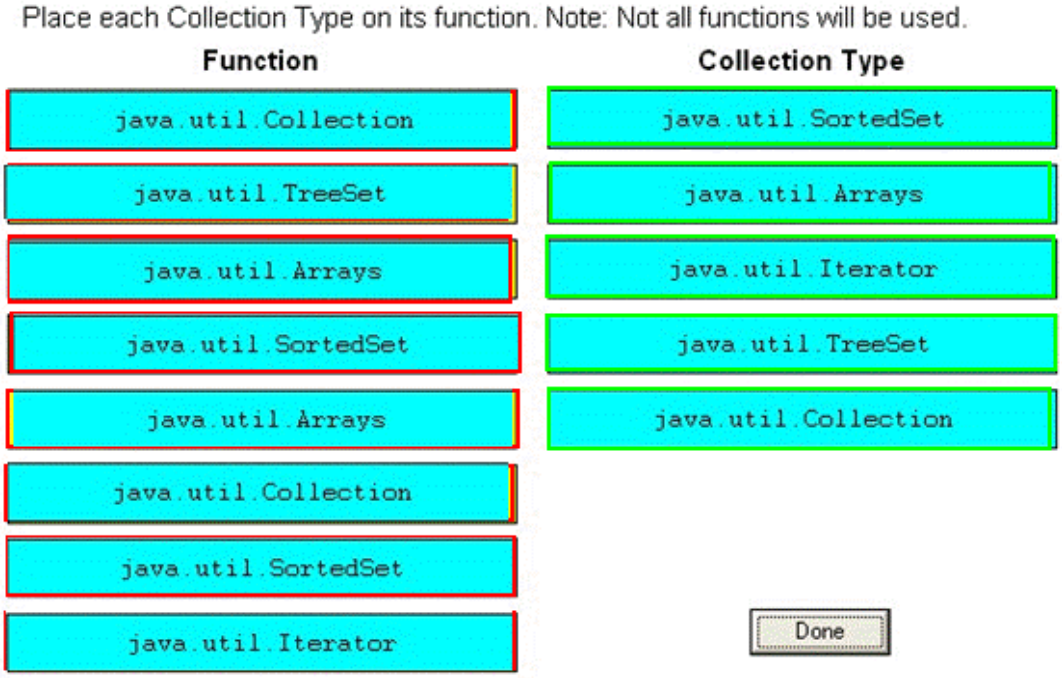


QUESTION NO: 232 DRAG DROP

Click the Task button.

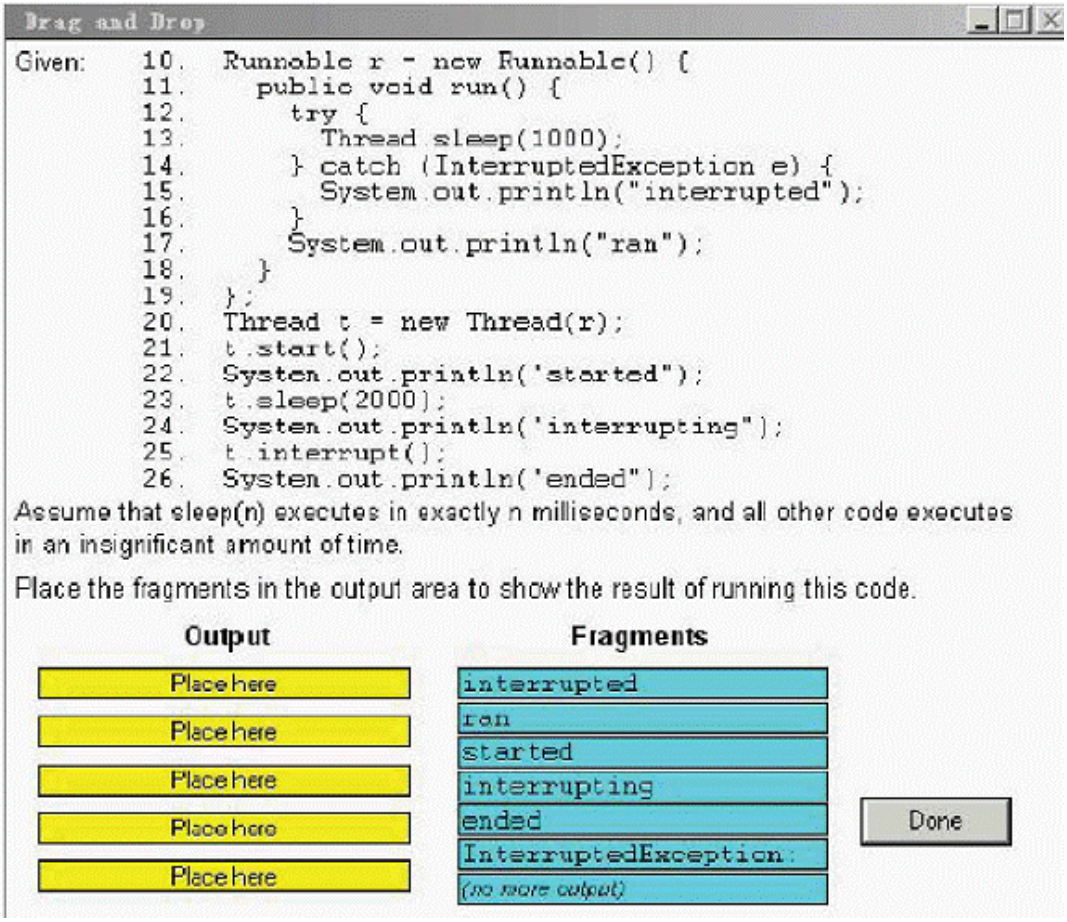


Answer:

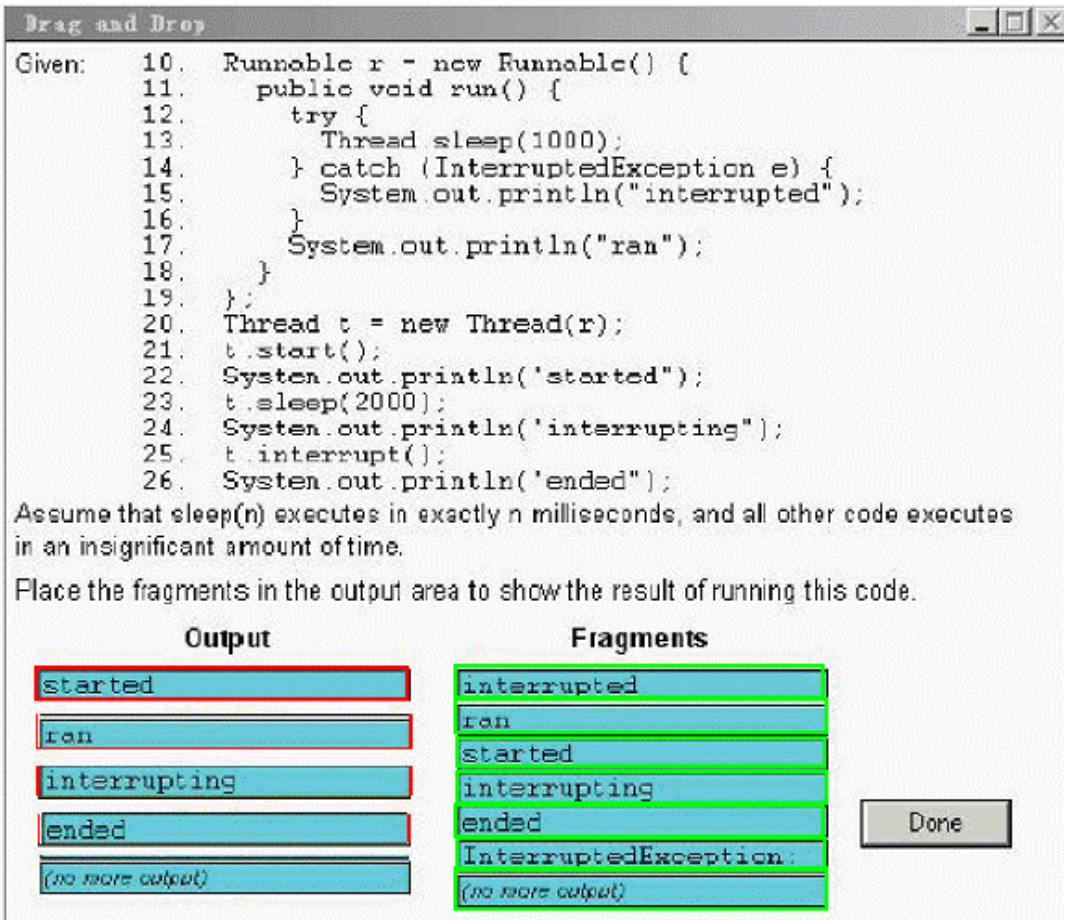


QUESTION NO: 233 DRAG DROP

Click the Task button.

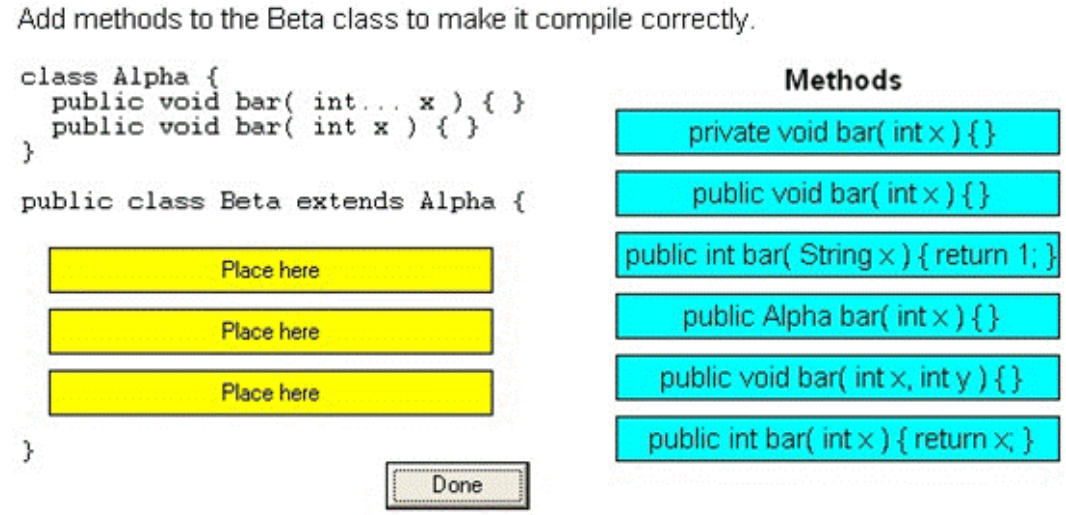


Answer:



QUESTION NO: 234 DRAG DROP

Click the Task button.



Answer:

Add methods to the Beta class to make it compile correctly.

```
class Alpha {
  public void bar( int... x ) { }
  public void bar( int x ) { }
}

public class Beta extends Alpha {

}
```

public void bar(int x, int y) { }

public int bar(String x) { return 1; }

public void bar(int x) { }

Done

Methods

private void bar(int x) { }

public void bar(int x) { }

public int bar(String x) { return 1; }

public Alpha bar(int x) { }

public void bar(int x, int y) { }

public int bar(int x) { return x; }

QUESTION NO: 235

Given:

5. class Payload {

6. private int weight;

7. public Payload (int w) { weight = w; }

8. public void setWeight(int w) { weight = w; }

9. public String toString() { return Integer.toString(weight); }

10. }

11. public class TestPayload {

12. static void changePayload(Payload p) { /* insert code */ }

13. public static void main(String[] args) {

14. Payload p = new Payload(200);

15. p.setWeight(1024);

16. changePayload(p);

17. System.out.println("p is " + p);

18. } }

Which code fragment, inserted at the end of line 12, produces the output p is 420?

A. p.setWeight(420);
B. p.changePayload(420);
C. p = new Payload(420);
D. Payload.setWeight(420);
E. p = Payload.setWeight(420);

Answer: A
Explanation:

QUESTION NO: 236

Given:

11. public void genNumbers() {

12. ArrayList numbers = new ArrayList();

13. for (int i=0; i<10; i++) {

14. int value = i * ((int) Math.random());

15. Integer intObj = new Integer(value);

16. numbers.add(intObj);

17. }

18. System.out.println(numbers);

19. }

Which line of code marks the earliest point that an object referenced by intObj becomes a candidate for garbage collection?

A. Line 16
B. Line 17
C. Line 18
D. Line 19
E. The object is NOT a candidate for garbage collection.

Answer: D
Explanation:

QUESTION NO: 237

Given a correctly compiled class whose source code is:

1. package com.sun.sjcp;

2. public class Commander {

3. public static void main(String[] args) {

4. // more code here

5. }

6. }

Assume that the class file is located in /foo/com/sun/sjcp/, the current directory is /foo/, and that the classpath contains "." (current directory). Which command line correctly runs Commander?

A. java Commander
B. java com.sun.sjcp.Commander
C. java com/sun/sjcp/Commander
D. java -cp com.sun.sjcp Commander
E. java -cp com/sun/sjcp Commander

Answer: B
Explanation:

QUESTION NO: 238

Given:

11. public static void test(String str) {

12. int check = 4;

13. if (check = str.length()) {

14. System.out.print(str.charAt(check -= 1) +", ");

15. } else {

16. System.out.print(str.charAt(0) + ", ");

17. }

18. } and the invocation:

21. test("four");

22. test("tee");

23. test("to");

What is the result?

A. r, t, t,
B. r, e, o,
C. Compilation fails.
D. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 239

A developer is creating a class Book, that needs to access class Paper. The Paper class is deployed in a JAR named myLib.jar. Which three, taken independently, will allow the developer to use the Paper class while compiling the Book class? (Choose three.)

A. The JAR file is located at $JAVA_HOME/jre/classes/myLib.jar.
B. The JAR file is located at $JAVA_HOME/jre/lib/ext/myLib.jar..
C. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar/Paper.class.
D. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar.
E. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -cp /foo/myLib.jar/Paper Book.java.
F. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -d /foo/myLib.jar Book.java
G. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -classpath /foo/myLib.jar Book.java

Answer: B,D,G
Explanation:

QUESTION NO: 240

Given:

1. package com.company.application;

2.

3. public class MainClass {

4. public static void main(String[] args) {}

5. } And MainClass exists in the /apps/com/company/application directory. Assume the CLASSPATH environment variable is set to "." (current directory).

Which two java commands entered at the command line will run MainClass? (Choose two.)

A. java MainClass if run from the /apps directory
B. java com.company.application.MainClass if run from the /apps directory
C. java -classpath /apps com.company.application.MainClass if run from any directory
D. java -classpath . MainClass if run from the /apps/com/company/application directory
E. java -classpath /apps/com/company/application:. MainClass if run from the /apps directory
F. java com.company.application.MainClass if run from the /apps/com/company/application directory

Answer: B,C
Explanation:

QUESTION NO: 241

Given:

3. public class Batman {

4. int squares = 81;

5. public static void main(String[] args) {

6. new Batman().go();

7. }

8. void go() {

9. incr(++squares);

10. System.out.println(squares);

11. }

12. void incr(int squares) { squares += 10; }

13. }

What is the result?

A. 81
B. 82
C. 91
D. 92
E. Compilation fails.
F. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 242

Given a class Repetition:

1. package utils;

2.

3. public class Repetition {

4. public static String twice(String s) { return s + s; }

5. } and given another class Demo:

1. // insert code here

2.

3. public class Demo {

4. public static void main(String[] args) {

5. System.out.println(twice("pizza"));

6. }

7. }

Which code should be inserted at line 1 of Demo.java to compile and run Demo to print "pizzapizza"?

A. import utils.*;
B. static import utils.*;
C. import utils.Repetition.*;
D. static import utils.Repetition.*;
E. import utils.Repetition.twice();
F. import static utils.Repetition.twice;

G. static import utils.Repetition.twice;

Answer: F
Explanation:

QUESTION NO: 243

Given:

1. interface DoStuff2 {

2. float getRange(int low, int high); }

3.

4. interface DoMore {

5. float getAvg(int a, int b, int c); }

6.

7. abstract class DoAbstract implements DoStuff2, DoMore { }

8.

9. class DoStuff implements DoStuff2 {

10. public float getRange(int x, int y) { return 3.14f; } }

11.

12. interface DoAll extends DoMore {

13. float getAvg(int a, int b, int c, int d); }

What is the result?

A. The file will compile without error.
B. Compilation fails. Only line 7 contains an error.
C. Compilation fails. Only line 12 contains an error.
D. Compilation fails. Only line 13 contains an error.
E. Compilation fails. Only lines 7 and 12 contain errors.
F. Compilation fails. Only lines 7 and 13 contain errors.
G. Compilation fails. Lines 7, 12, and 13 contain errors.

Answer: A
Explanation:

QUESTION NO: 244

Given that Triangle implements Runnable, and:

```
31. void go() throws Exception {
32. Thread t = new Thread(new Triangle());
33. t.start();
34. for(int x = 1; x < 100000; x++) {
35. //insert code here
36. if(x%100 == 0) System.out.print("g");
37. } }
38. public void run() {
39. try {
40. for(int x = 1; x < 100000; x++) {
41. // insert the same code here
42. if(x%100 == 0) System.out.print("t");
43. }
44. } catch (Exception e) { }
45. }
```

Which two statements, inserted independently at both lines 35 and 41, tend to allow both threads to temporarily pause and allow the other thread to execute? (Choose two.)

A. Thread.wait();
B. Thread.join();
C. Thread.yield();
D. Thread.sleep(1);
E. Thread.notify();

Answer: C,D

Explanation:

QUESTION NO: 245

Which two code fragments will execute the method doStuff() in a separate thread? (Choose two.)

A. new Thread() {
public void run() { doStuff(); }
};
B. new Thread() {
public void start() { doStuff(); }
};
C. new Thread() {
public void start() { doStuff(); }
}.run();
D. new Thread() {
public void run() { doStuff(); }
}.start();
E. new Thread(new Runnable() {
public void run() { doStuff(); }
}).run();
F. new Thread(new Runnable() {
public void run() { doStuff(); }
}).start();

Answer: D,F
Explanation:

QUESTION NO: 246

Given: public class NamedCounter {

private final String name;

private int count;

public NamedCounter(String name) { this.name = name; }

public String getName() { return name; }

public void increment() { count++; }

public int getCount() { return count; }

public void reset() { count = 0; }

}

Which three changes should be made to adapt this class to be used safely by multiple threads? (Choose three.)

A. declare reset() using the synchronized keyword
B. declare getName() using the synchronized keyword
C. declare getCount() using the synchronized keyword
D. declare the constructor using the synchronized keyword
E. declare increment() using the synchronized keyword

Answer: A,C,E

Explanation:

QUESTION NO: 247

Given that t1 is a reference to a live thread, which is true?

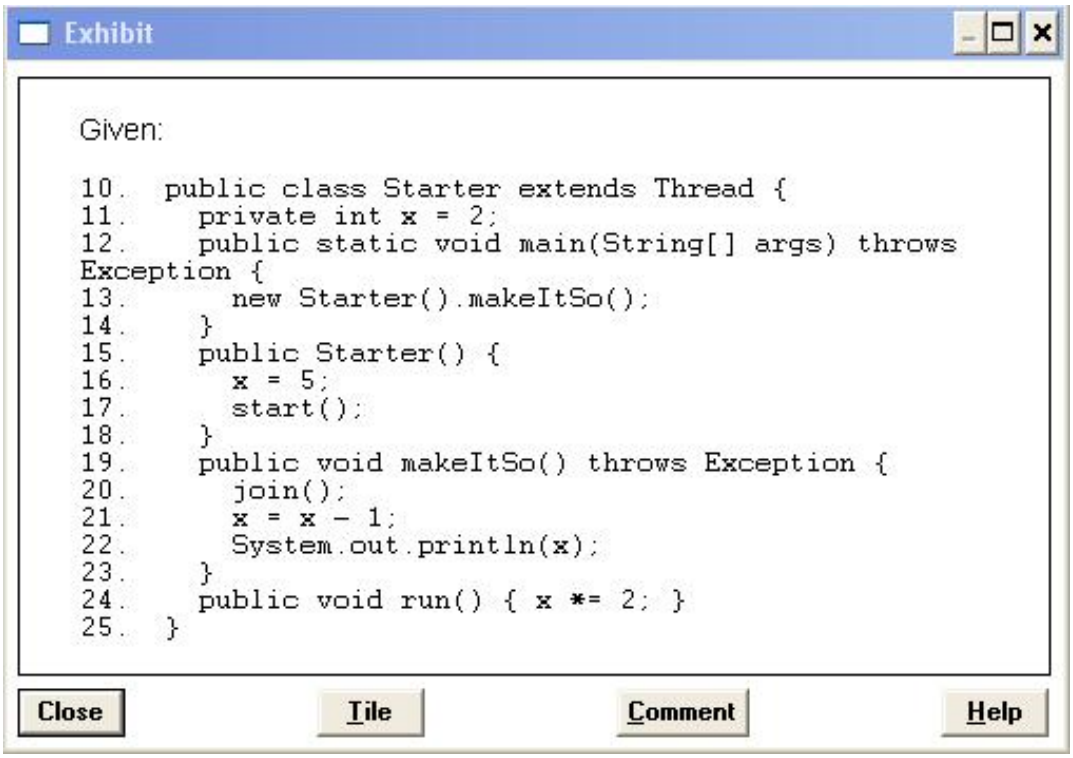
A. The Thread.sleep() method can take t1 as an argument.
B. The Object.notify() method can take t1 as an argument.
C. The Thread.yield() method can take t1 as an argument.
D. The Thread.setPriority() method can take t1 as an argument.
E. The Object.notify() method arbitrarily chooses which thread to notify.

Answer: E

Explanation:

QUESTION NO: 248

Click the Exhibit button. What is the output if the main() method is run?



A. 4
B. 5
C. 8
D. 9
E. Compilation fails.
F. An exception is thrown at runtime.
G. It is impossible to determine for certain.

Answer: D
Explanation:

QUESTION NO: 249

Given:

1. class TestA {

2. public void start() { System.out.println("TestA"); }

3. }

4. public class TestB extends TestA {

5. public void start() { System.out.println("TestB"); }

6. public static void main(String[] args) {

7. ((TestA)new TestB()).start();

8. }

9. }

What is the result?

A. TestA
B. TestB
C. Compilation fails.
D. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 250

Which two code fragments correctly create and initialize a static array of int elements? (Choose two.)

A. static final int[] a = { 100,200 };
B. static final int[] a;
static { a=new int[2]; a[0]=100; a[1]=200; }
C. static final int[] a = new int[2]{ 100,200 };
D. static final int[] a;
static void init() { a = new int[3]; a[0]=100; a[1]=200; }

Answer: A,B
Explanation:

QUESTION NO: 251

Given:

11. public abstract class Shape {

12. private int x;

13. private int y;

14. public abstract void draw();

15. public void setAnchor(int x, int y) {

16. this.x = x;

17. this.y = y;

18. }

19. }

Which two classes use the Shape class correctly? (Choose two.)

A. public class Circle implements Shape {
private int radius;
}
B. public abstract class Circle extends Shape {
private int radius;
}
C. public class Circle extends Shape {
private int radius;
public void draw();
}
D. public abstract class Circle implements Shape {
private int radius;
public void draw();
}
E. public class Circle extends Shape {
private int radius;
public void draw() {/* code here */}
F. public abstract class Circle implements Shape {
private int radius;
public void draw() { /* code here */ }

Answer: B,E
Explanation:

QUESTION NO: 252

Given:

10. class Nav{

11. public enum Direction { NORTH, SOUTH, EAST, WEST }

12. }

13. public class Sprite{

14. // insert code here

15. }

Which code, inserted at line 14, allows the Sprite class to compile?

A. Direction d = NORTH;
B. Nav.Direction d = NORTH;
C. Direction d = Direction.NORTH;
D. Nav.Direction d = Nav.Direction.NORTH;

Answer: D
Explanation:

QUESTION NO: 253

Given:

5. class Atom {

6. Atom() { System.out.print("atom "); }

7. }

8. class Rock extends Atom {

9. Rock(String type) { System.out.print(type); }

10. }

11. public class Mountain extends Rock {

12. Mountain() {

13. super("granite ");

14. new Rock("granite ");

15. }

16. public static void main(String[] a) { new Mountain(); }

17. }

What is the result?

A. Compilation fails.
B. atom granite
C. granite granite

D. atom granite granite
E. An exception is thrown at runtime.
F. atom granite atom granite

Answer: F
Explanation:

QUESTION NO: 254

Given:

1. public class A {

2. public void doit() {

3. }

4. public String doit() {

5. return "a";

6. }

7. public double doit(int x) {

8. return 1.0;

9. }

10. }

What is the result?

A. An exception is thrown at runtime.
B. Compilation fails because of an error in line 7.
C. Compilation fails because of an error in line 4.
D. Compilation succeeds and no runtime errors with class A occur.

Answer: C
Explanation:

QUESTION NO: 255

Given:

21. abstract class C1 {

22. public C1() { System.out.print(1); }

23. }

24. class C2 extends C1 {

25. public C2() { System.out.print(2); }

26. }

27. class C3 extends C2 {

28. public C3() { System.out.println(3); }

29. }

30. public class Ctest {

31. public static void main(String[] a) { new C3(); }

32. }

What is the result?

A. 3
B. 23
C. 32
D. 123
E. 321
F. Compilation fails.
G. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 256

Given:

11. public class Rainbow {

12. public enum MyColor {

13. RED(0xff0000), GREEN(0x00ff00), BLUE(0x0000ff);

14. private final int rgb;

15. MyColor(int rgb) { this.rgb = rgb; }

16. public int getRGB() { return rgb; }

17. };

18. public static void main(String[] args) {

19. // insert code here

20. }

21. }

Which code fragment, inserted at line 19, allows the Rainbow class to compile?

A. MyColor skyColor = BLUE;
B. MyColor treeColor = MyColor.GREEN;
C. if(RED.getRGB() < BLUE.getRGB()) { }
D. Compilation fails due to other error(s) in the code.
E. MyColor purple = new MyColor(0xff00ff);
F. MyColor purple = MyColor.BLUE + MyColor.RED;

Answer: B
Explanation:

QUESTION NO: 257

A company that makes Computer Assisted Design (CAD) software has, within its application, some utility classes that are used to perform 3D rendering tasks. The company's chief scientist has just improved the performance of one of the utility classes' key rendering algorithms, and has assigned a programmer to replace the old algorithm with the new algorithm. When the programmer begins researching the utility classes, she is happy to discover that the algorithm to be replaced exists in only one class. The programmer reviews that class's API, and replaces the old algorithm with the new algorithm, being careful that her changes adhere strictly to the class's API. Once testing has begun, the programmer discovers that other classes that use the class she changed are no longer working properly. What design flaw is most likely the cause of these new bugs?

A. Inheritance
B. Tight coupling
C. Low cohesion
D. High cohesion
E. Loose coupling
F. Object immutability

Answer: B
Explanation:

QUESTION NO: 258

Given:

11. abstract class Vehicle { public int speed() { return 0; }

12. class Car extends Vehicle { public int speed() { return 60; }

13. class RaceCar extends Car { public int speed() { return 150; } ...

21. RaceCar racer = new RaceCar();

22. Car car = new RaceCar();

23. Vehicle vehicle = new RaceCar();

24. System.out.println(racer.speed() + ", " + car.speed()

25. + ", " + vehicle.speed());

What is the result?

A. 0, 0, 0
B. 150, 60, 0
C. Compilation fails.
D. 150, 150, 150
E. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 259

Given:

11. class Mammal { }

12.

13. class Raccoon extends Mammal {

14. Mammal m = new Mammal();

15. }

16.

17. class BabyRaccoon extends Mammal { } Which four statements are true? (Choose four.)

A. Raccoon is-a Mammal.
B. Raccoon has-a Mammal.
C. BabyRaccoon is-a Mammal.
D. BabyRaccoon is-a Raccoon.
E. BabyRaccoon has-a Mammal.
F. BabyRaccoon is-a BabyRaccoon.

Answer: A,B,C,F
Explanation:

QUESTION NO: 260

Given:

10. public class SuperCalc {

11. protected static int multiply(int a, int b) { return a * b;}

12. }

and:

20. public class SubCalc extends SuperCalc{

21. public static int multiply(int a, int b) {

22. int c = super.multiply(a, b);

23. return c;

24. }

25. }

and:

30. SubCalc sc = new SubCalc ();

31. System.out.println(sc.multiply(3,4));

32. System.out.println(SubCalc.multiply(2,2));

What is the result?

A. 12
4
B. The code runs with no output.
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 21.
E. Compilation fails because of an error in line 22.
F. Compilation fails because of an error in line 31.

Answer: E

Explanation:

QUESTION NO: 261

Given:

3. class Employee {

4. String name; double baseSalary;

5. Employee(String name, double baseSalary) {

6. this.name = name;

7. this.baseSalary = baseSalary;

8. }

9. }

10. public class SalesPerson extends Employee {

11. double commission;

12. public SalesPerson(String name, double baseSalary, double commission) {

13. // insert code here

14. }

15. }

Which two code fragments, inserted independently at line 13, will compile? (Choose two.)

A. super(name, baseSalary);
B. this.commission = commission;

C. super();
this.commission = commission;
D. this.commission = commission;
super();
E. super(name, baseSalary);
this.commission = commission;
F. this.commission = commission;
super(name, baseSalary);
G. super(name, baseSalary, commission);

Answer: A,E
Explanation:

QUESTION NO: 262

Given:

11. class A {

12. public void process() { System.out.print("A,"); }

13. class B extends A {

14. public void process() throws IOException {

15. super.process();

16. System.out.print("B,");

17. throw new IOException();

18. }

19. public static void main(String[] args) {

20. try { new B().process(); }

21. catch (IOException e) { System.out.println("Exception"); }

22. }

What is the result?

A. Exception
B. A,B,Exception
C. Compilation fails because of an error in line 20.
D. Compilation fails because of an error in line 14.

E. A NullPointerException is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 263

Given a method that must ensure that its parameter is not null:

11. public void someMethod(Object value) {

12. // check for null value ...

20. System.out.println(value.getClass());

21. }

What, inserted at line 12, is the appropriate way to handle a null value?

A. assert value == null;
B. assert value != null, "value is null";
C. if (value == null) {
throw new AssertionException("value is null");
}
D. if (value == null) {
throw new IllegalArgumentException("value is null");
}

Answer: D
Explanation:

QUESTION NO: 264

Given:

11. public static void main(String[] args) {

12. try {

13. args = null;

14. args[0] = "test";

15. System.out.println(args[0]);

16. } catch (Exception ex) {

17. System.out.println("Exception");

18. } catch (NullPointerException npe) {

19. System.out.println("NullPointerException");

20. }

21. }

What is the result?

A. test
B. Exception
C. Compilation fails.
D. NullPointerException

Answer: C
Explanation:

QUESTION NO: 265

Given:

11. public static Iterator reverse(List list) {

12. Collections.reverse(list);

13. return list.iterator();

14. }

15. public static void main(String[] args) {

16. List list = new ArrayList();

17. list.add("1"); list.add("2"); list.add("3");

18. for (Object obj: reverse(list))

19. System.out.print(obj + ", ");

20. }

What is the result?

A. 3, 2, 1,
B. 1, 2, 3,
C. Compilation fails.
D. The code runs with no output.
E. An exception is thrown at runtime.

Answer: C
Explanation:

QUESTION NO: 266

Given:

```
11. public class Test {
12. public static void main(String [] args) {
13. int x = 5;
14. boolean b1 = true;
15. boolean b2 = false;
16.
17. if ((x == 4) && !b2 )
18. System.out.print("1 ");
19. System.out.print("2 ");
20. if ((b2 = true) && b1 )
21. System.out.print("3 ");
22. }
23. }
```

What is the result?

A. 2
B. 3
C. 1 2
D. 2 3
E. 1 2 3
F. Compilation fails.
G. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 267

Given:

```
11. class X { public void foo() { System.out.print("X "); } }
12.
13. public class SubB extends X {
14. public void foo() throws RuntimeException {
15. super.foo();
16. if (true) throw new RuntimeException();
17. System.out.print("B ");
18. }
19. public static void main(String[] args) {
20. new SubB().foo();
21. }
22. }
```

What is the result?

A. X, followed by an Exception.
B. No output, and an Exception is thrown.
C. Compilation fails due to an error on line 14.
D. Compilation fails due to an error on line 16.
E. Compilation fails due to an error on line 17.
F. X, followed by an Exception, followed by B.

Answer: A
Explanation:

QUESTION NO: 268

Given:

1. public class Mule {

2. public static void main(String[] args) {

3. boolean assert = true;

4. if(assert) {

5. System.out.println("assert is true");

6. }

7. }

8. }

Which command-line invocations will compile?

A. javac Mule.java
B. javac -source 1.3 Mule.java
C. javac -source 1.4 Mule.java
D. javac -source 1.5 Mule.java

Answer: B
Explanation:

QUESTION NO: 269

Given:

11. public static Collection get() {

12. Collection sorted = new LinkedList();

13. sorted.add("B"); sorted.add("C"); sorted.add("A");

14. return sorted;

15. }

16. public static void main(String[] args) {

17. for (Object obj: get()) {

18. System.out.print(obj + ", ");

19. }

20. }

What is the result?

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

Answer: B
Explanation:

QUESTION NO: 270

Given:

11. public void testIfA() {

12. if (testIfB("True")) {

13. System.out.println("True");

14. } else {

15. System.out.println("Not true");

16. }

17. }

18. public Boolean testIfB(String str) {

19. return Boolean.valueOf(str);

20. }

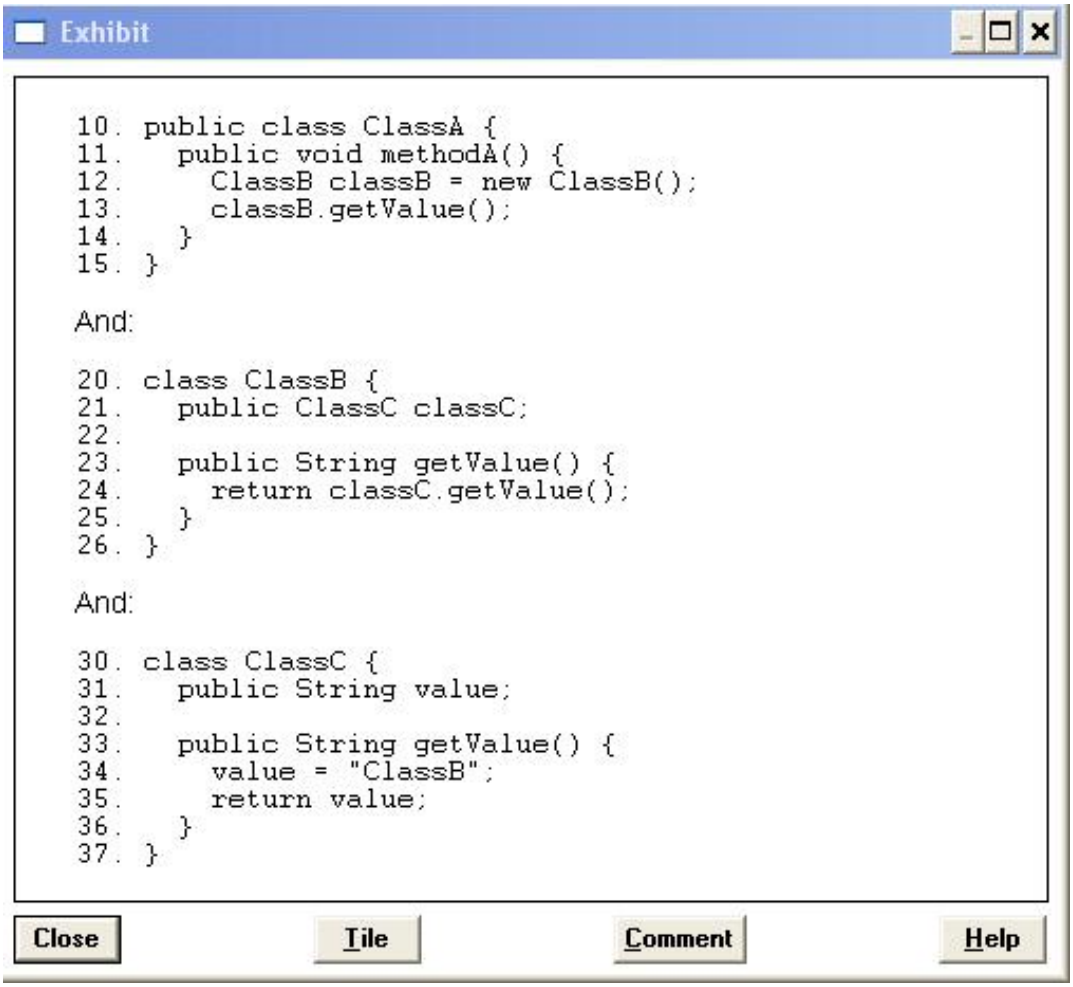
What is the result when method testIfA is invoked?

A. True
B. Not true
C. An exception is thrown at runtime.
D. Compilation fails because of an error at line 12.
E. Compilation fails because of an error at line 19.

Answer: A
Explanation:

QUESTION NO: 271

Click the Exhibit button. Given: ClassA a = new ClassA(); a.methodA(); What is the result?



A. Compilation fails.
B. ClassC is displayed.
C. The code runs with no output.
D. An exception is thrown at runtime.

Answer: D
Explanation:

QUESTION NO: 272

Click the Exhibit button.

Given:

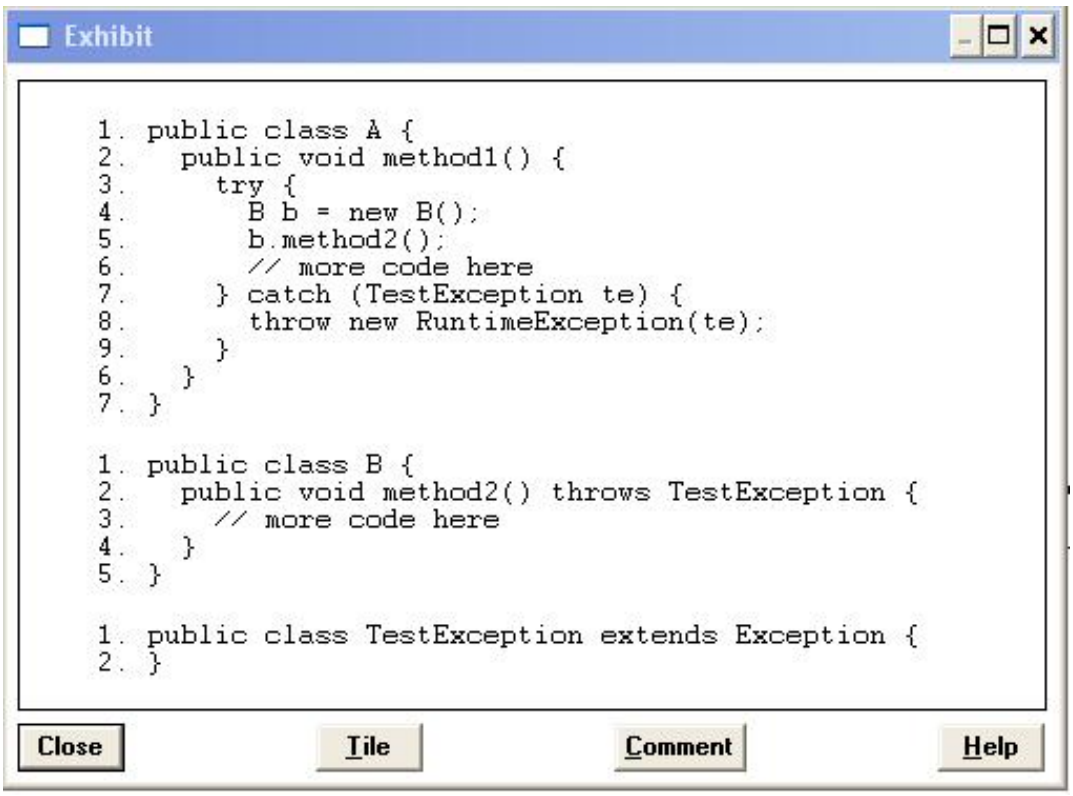
31. public void method() {

32. A a = new A();

33. a.method1();

34. }

Which statement is true if a TestException is thrown on line 3 of class B?



A. Line 33 must be called within a try block.
B. The exception thrown by method1 in class A is not required to be caught.
C. The method declared on line 31 must be declared to throw a RuntimeException.
D. On line 5 of class A, the call to method2 of class B does not need to be placed in a try/catch block.

Answer: B
Explanation:

QUESTION NO: 273

Given that the elements of a PriorityQueue are ordered according to natural ordering, and:

2. import java.util.*;

3. public class GetInLine {

4. public static void main(String[] args) {

5. PriorityQueue<String> pq = new PriorityQueue<String>();

6. pq.add("banana");

7. pq.add("pear");

8. pq.add("apple");

9. System.out.println(pq.poll() + " " + pq.peek());

10. }

11. }

What is the result?

A. apple pear
B. banana pear
C. apple apple
D. apple banana
E. banana banana

Answer: D
Explanation:

QUESTION NO: 274

Given:

11. public class Person {

12. private String name, comment;

13. private int age;

14. public Person(String n, int a, String c) {

15. name = n; age = a; comment = c;

16. }

17. public boolean equals(Object o) {

18. if (! (o instanceof Person)) return false;

19, Person p = (Person)o;

20. return age == p.age && name.equals(p.name);

21. }

22. }

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;

Answer: B
Explanation:

QUESTION NO: 275

A programmer must create a generic class MinMax and the type parameter of MinMax must implement Comparable. Which implementation of MinMax will compile?

A. class MinMax<E extends Comparable<E>> {
E min = null;
E max = null;
public MinMax() {}
public void put(E value) { /* store min or max */ }
B. class MinMax<E implements Comparable<E>> {
E min = null;
E max = null;
public MinMax() {}
public void put(E value) { /* store min or max */ }
C. class MinMax<E extends Comparable<E>> {
<E> E min = null;
<E> E max = null;
public MinMax() {}
public <E> void put(E value) { /* store min or max */ }
D. class MinMax<E implements Comparable<E>> {
<E> E min = null;
<E> E max = null;
public MinMax() {}
public <E> void put(E value) { /* store min or max */ }

Answer: A
Explanation:

QUESTION NO: 276

Given:

3. import java.util.*;

4. public class G1 {

5. public void takeList(List<? extends String> list) {

6. // insert code here

7. }

8. }

Which three code fragments, inserted independently at line 6, will compile? (Choose three.)

A. list.add("foo");
B. Object o = list;
C. String s = list.get(0);
D. list = new ArrayList<String>();
E. list = new ArrayList<Object>();

Answer: B,C,D
Explanation:

QUESTION NO: 277

Given:

1. public class Drink implements Comparable {

2. public String name;

3. public int compareTo(Object o) {

4. return 0;

5. }

6. }

and:

20. Drink one = new Drink();

21. Drink two = new Drink();

22. one.name= "Coffee";

23. two.name= "Tea";

24. TreeSet set = new TreeSet();

25. set.add(one);

26. 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.

Answer: B
Explanation:

QUESTION NO: 278

Which two scenarios are NOT safe to replace a StringBuffer object with a StringBuilder object? (Choose two.)

A. When using versions of Java technology earlier than 5.0.
B. When sharing a StringBuffer among multiple threads.
C. When using the java.io class StringBufferInputStream.
D. When you plan to reuse the StringBuffer to build more than one string.

Answer: A,B
Explanation:

QUESTION NO: 279

Given:

1. public class LineUp {

2. public static void main(String[] args) {

3. double d = 12.345;

4. // insert code here

5. }

6. }

Which code fragment, inserted at line 4, produces the output | 12.345|?

A. System.out.printf("|%7d| \n", d);
B. System.out.printf("|%7f| \n", d);
C. System.out.printf("|%3.7d| \n", d);
D. System.out.printf("|%3.7f| \n", d);
E. System.out.printf("|%7.3d| \n", d);
F. System.out.printf("|%7.3f| \n", d);

Answer: F
Explanation:

QUESTION NO: 280

Given that the current directory is empty, and that the user has read and write privileges to the current directory, and the following:

1. import java.io.*;

2. public class Maker {

3. public static void main(String[] args) {

4. File dir = new File("dir");

5. File f = new File(dir, "f");

6. }

7. }

Which statement is true?

A. Compilation fails.
B. Nothing is added to the file system.
C. Only a new file is created on the file system.
D. Only a new directory is created on the file system.
E. Both a new file and a new directory are created on the file system.

Answer: B
Explanation:

QUESTION NO: 281

Given:

1. d is a valid, non-null Date object

2. df is a valid, non-null DateFormat object set to the current locale What outputs the current locale's country name and the appropriate version of d's date?

A. Locale loc = Locale.getLocale();
System.out.println(loc.getDisplayCountry()
+ " " + df.format(d));
B. Locale loc = Locale.getDefault();
System.out.println(loc.getDisplayCountry()
+ " " + df.format(d));
C. Locale loc = Locale.getLocale();
System.out.println(loc.getDisplayCountry()
+ " " + df.setDateFormat(d));
D. Locale loc = Locale.getDefault();
System.out.println(loc.getDisplayCountry()
+ " " + df.setDateFormat(d));

Answer: B
Explanation:

QUESTION NO: 282

Given:

1. public class BuildStuff {

2. public static void main(String[] args) {

3. Boolean test = new Boolean(true);

```
4. Integer x = 343;

5. Integer y = new BuildStuff().go(test, x);

6. System.out.println(y);

7. }

8. int go(Boolean b, int i) {

9. if(b) return (i/7);

10. return (i/49);

11. }

12. }
```

What is the result?

A. 7
B. 49
C. 343
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: B
Explanation:

QUESTION NO: 283 DRAG DROP

Click the Task button.

Given:
```
NumberNames nn = new NumberNames();
nn.put("one", 1);
System.out.println(nn.getNames());
```

Place the code into position to create a class that maps from Strings to integer values. The result of execution must be [one]. Some options may be used more than once.

```
public class NumberNames {
  private HashMap< Place here , Place here > map =
      new HashMap< Place here , Place here Place here ;
  public void put(String name, int value) {
    map.put( Place here , Place here );
  }
  public Place here getNames() {
    return map.keySet();
  }
}
```

Code

Set<int>	Set<Integer>	HashSet	
Set<Integer,String>	Set<int, String>	Set<String,Integer>	
Set<String, int>	Set<String>	NumberNames	
String	Integer	int	>
>()	name	value	map

Done

Answer:

Given:
```
NumberNames nn = new NumberNames();
nn.put("one", 1);
System.out.println(nn.getNames());
```

Place the code into position to create a class that maps from Strings to integer values. The result of execution must be [one]. Some options may be used more than once.

```
public class NumberNames {
  private HashMap< String , Integer > map =
      new HashMap< String , Integer >() ;
  public void put(String name, int value) {
    map.put( name , value );
  }
  public Set<String> getNames() {
    return map.keySet();
  }
}
```

Code

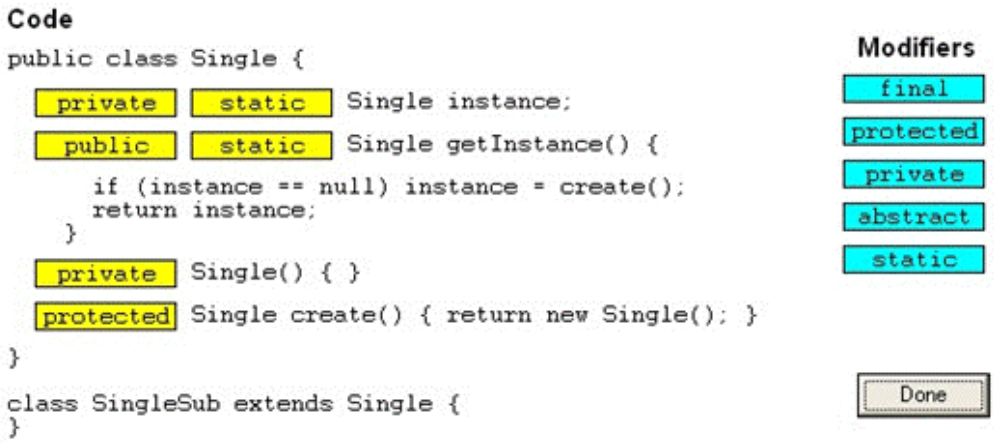
Set<int>	Set<Integer>	HashSet	
Set<Integer,String>	Set<int, String>	Set<String,Integer>	
Set<String, int>	Set<String>	NumberNames	
String	Integer	int	>
>()	name	value	map

Done

QUESTION NO: 284 DRAG DROP

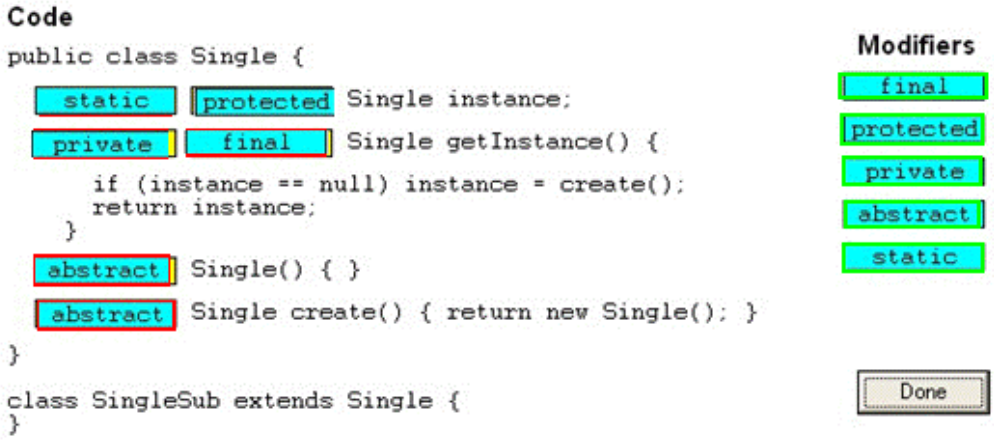
Click the Task button.

Replace two of the Modifiers that appear in the `Single` class to make the code compile.
Note: Three modifiers will not be used and four modifiers in the code will remain unchanged.



Answer:

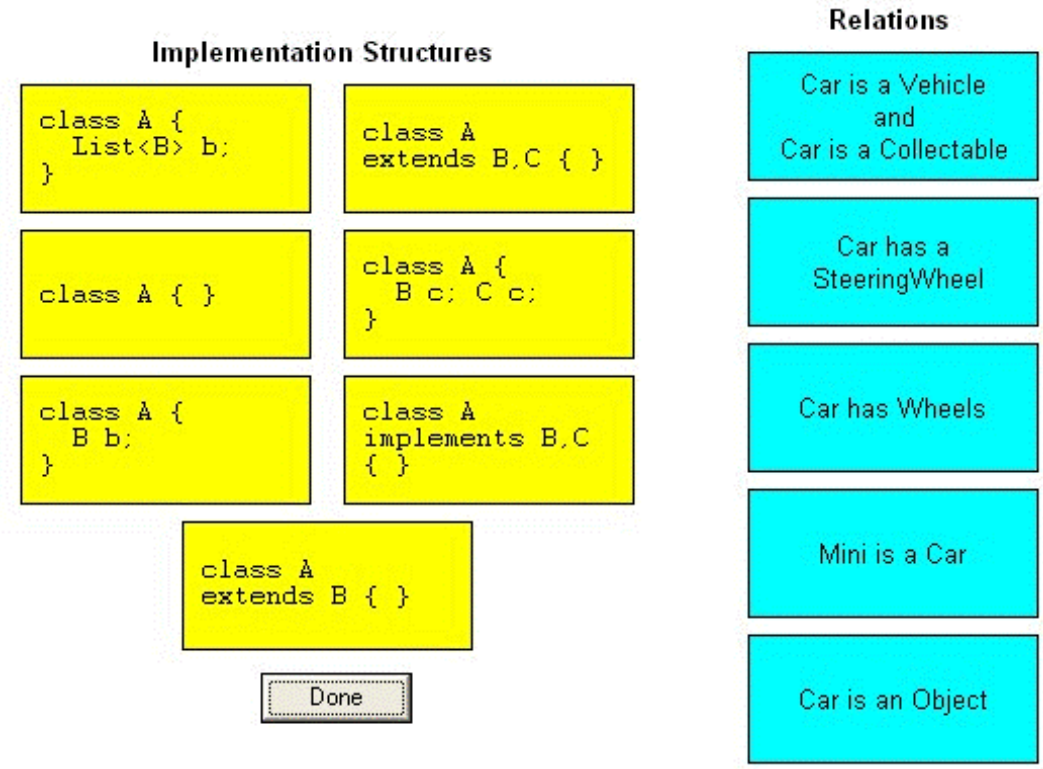
Replace two of the Modifiers that appear in the `Single` class to make the code compile.
Note: Three modifiers will not be used and four modifiers in the code will remain unchanged.



QUESTION NO: 285 DRAG DROP

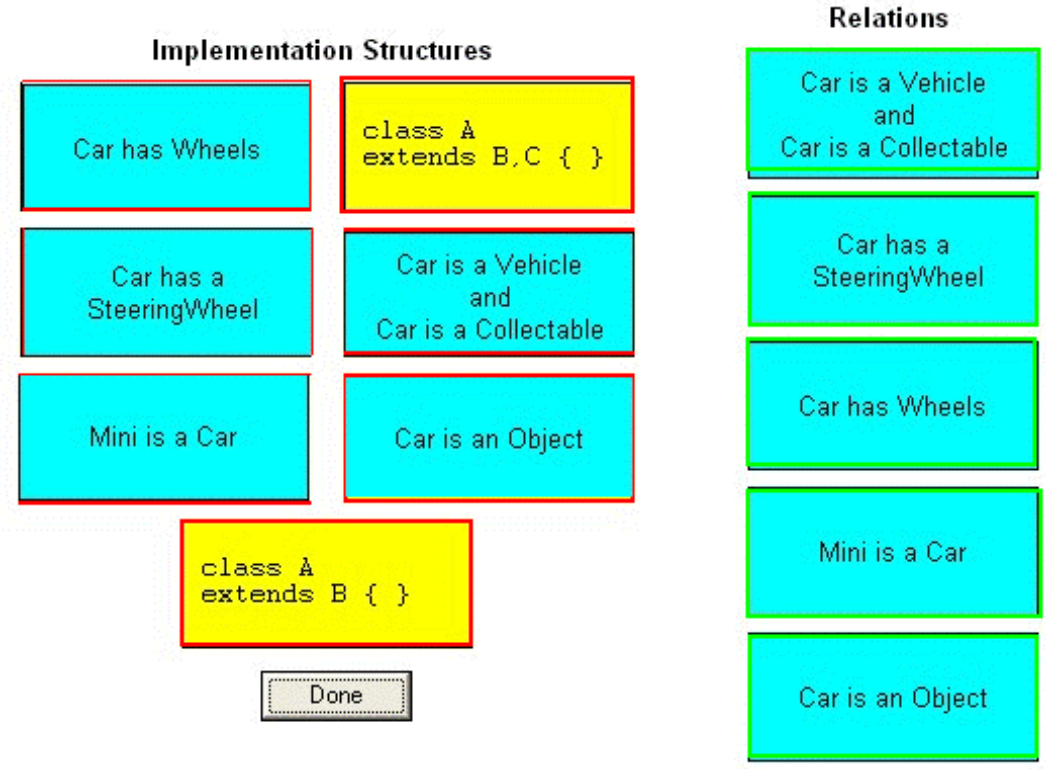
Click the Task button.

Place the Relations on their corresponding Implementation Structures.
Note: Not all Implementation Structures will be used.



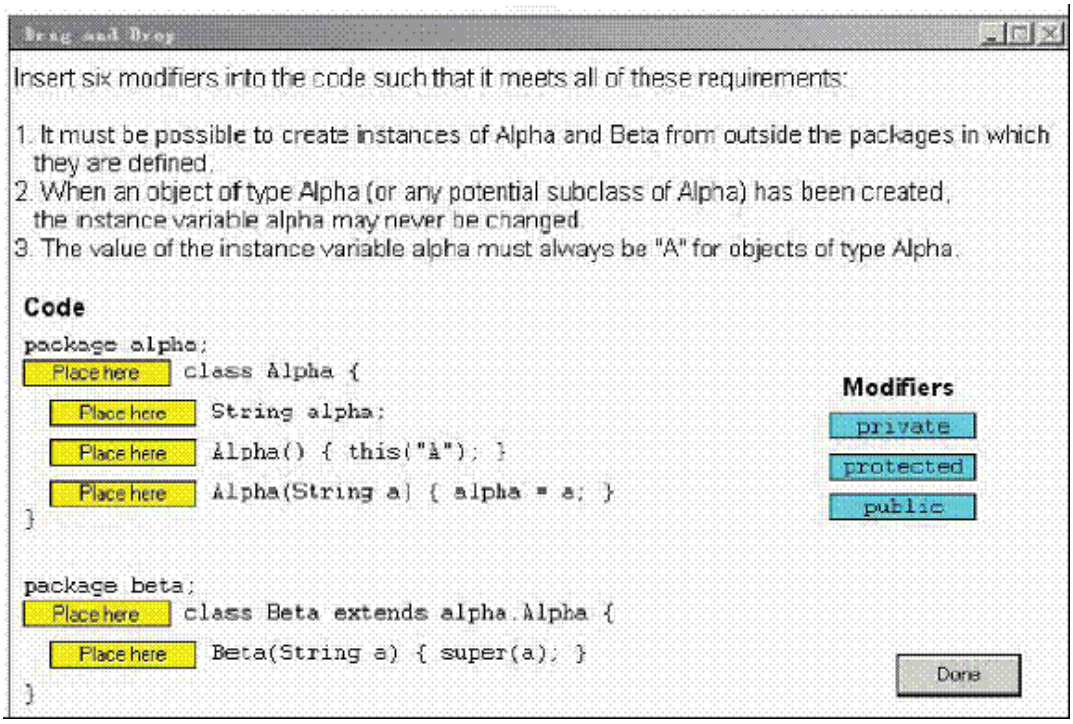
Answer:

Place the Relations on their corresponding Implementation Structures.
Note: Not all Implementation Structures will be used.

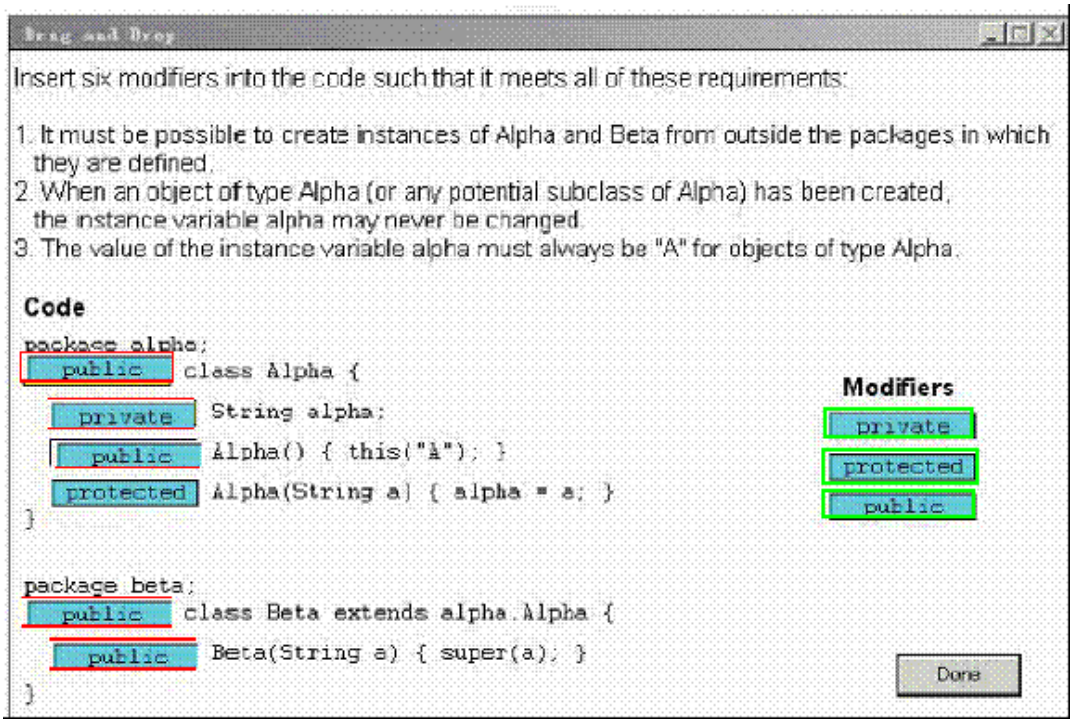


QUESTION NO: 286 DRAG DROP

Click the Task button.



Answer:



QUESTION NO: 287 DRAG DROP

Click the Task button.

Given:

```
1. import java.util.*;
2. public class TestGenericConversion {
3.   public static void main(String[] args) {
4.     List list = new LinkedList();
5.     list.add("one");
6.     list.add("two");
7.     System.out.print(((String)list.get(0)).length());
8.   }
9. }
```

Refactor this class to use generics without changing the code's behavior.

```
1. import java.util.*;
2. public class TestGenericConversion {
3.   public static void main(String[] args) {
4.     [ Place here ]
5.     list.add("one");
6.     list.add("two");
7.     [ Place here ]
8.   }
9. }
```

Code

List list = new LinkedList();	System.out.print(list.get(0).length());
List<String> list = new LinkedList<String>();	System.out.print(list.get<String>(0).length());
List<String> list = new LinkedList();	System.out.print(<String>list.get(0).length());
List list = new LinkedList<String>();	System.out.print(((List<String>)list.get(0)).length());

Answer:

Given:

```
1. import java.util.*;
2. public class TestGenericConversion {
3.   public static void main(String[] args) {
4.     List list = new LinkedList();
5.     list.add("one");
6.     list.add("two");
7.     System.out.print(((String)list.get(0)).length());
8.   }
9. }
```

Refactor this class to use generics without changing the code's behavior.

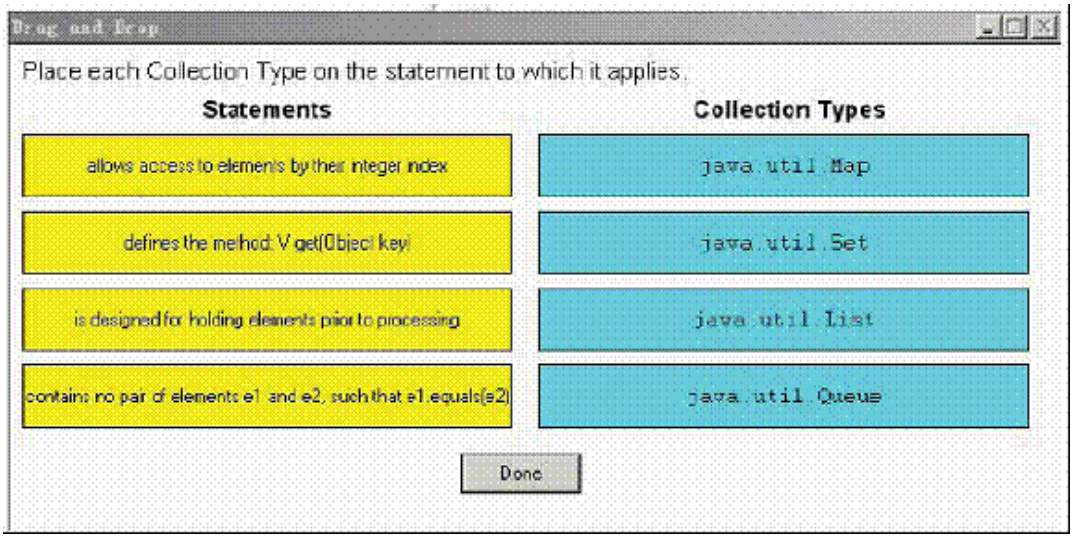
```
1. import java.util.*;
2. public class TestGenericConversion {
3.   public static void main(String[] args) {
4.     [ List<String> list = new LinkedList<String>(); ]
5.     list.add("one");
6.     list.add("two");
7.     [ System.out.print( list.get(0).length() ); ]
8.   }
9. }
```

Code

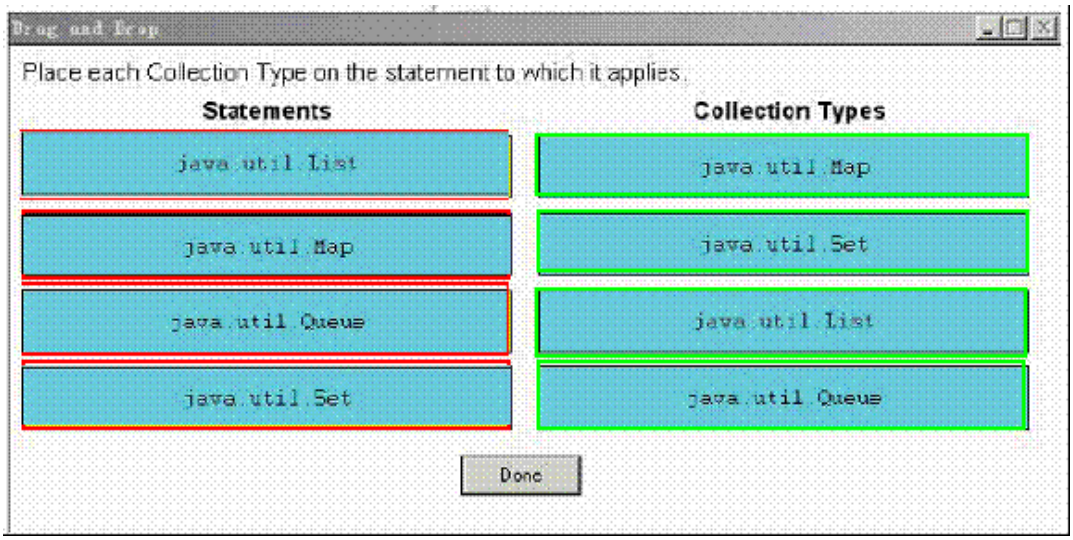
List list = new LinkedList();	System.out.print(list.get(0).length());
List<String> list = new LinkedList<String>();	System.out.print(list.get<String>(0).length());
List<String> list = new LinkedList();	System.out.print(<String>list.get(0).length());
List list = new LinkedList<String>();	System.out.print(((List<String>)list.get(0)).length());

QUESTION NO: 288 DRAG DROP

Click the Task button.

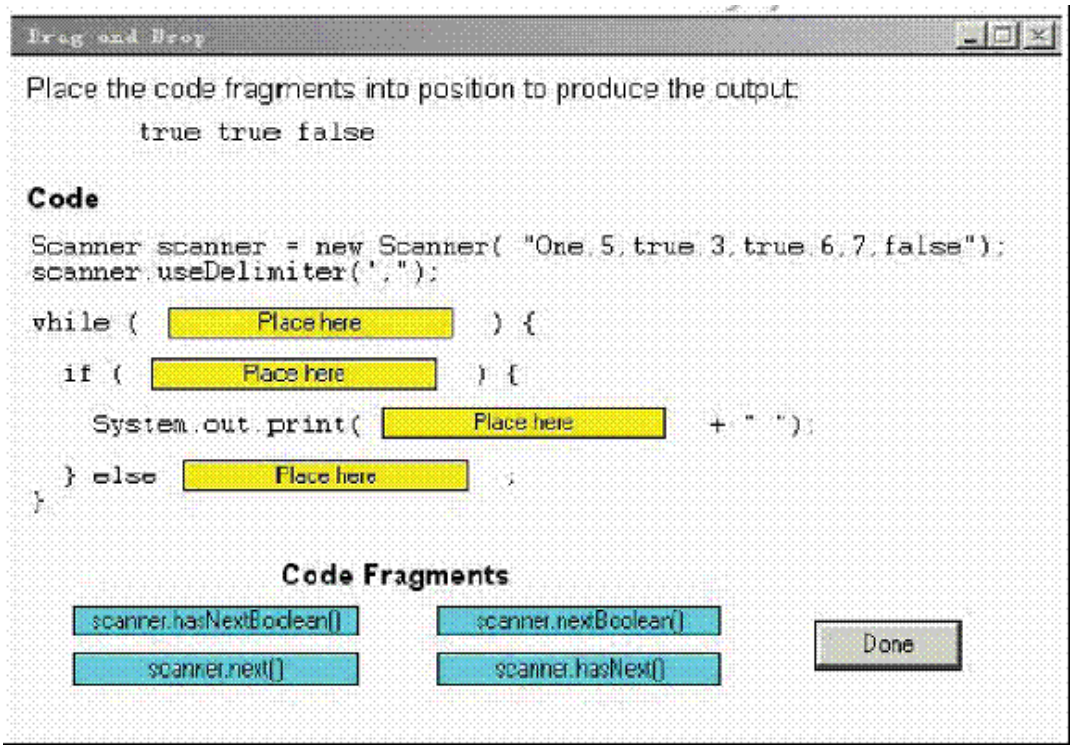


Answer:

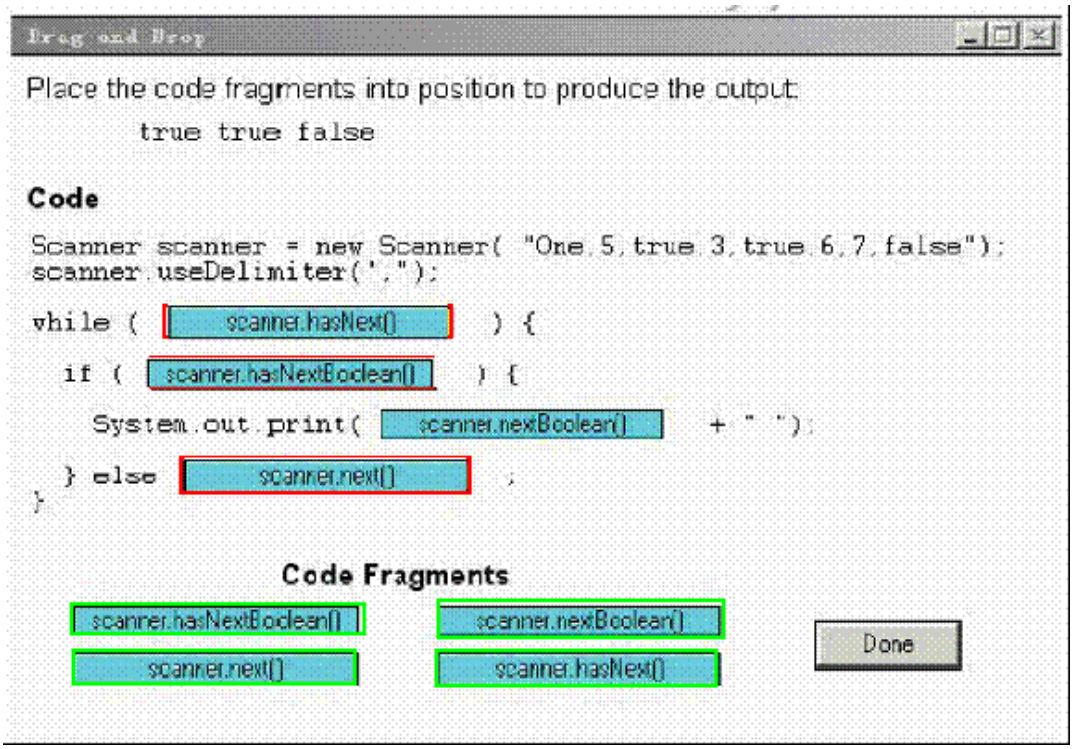


QUESTION NO: 289 DRAG DROP

Click the Task button.

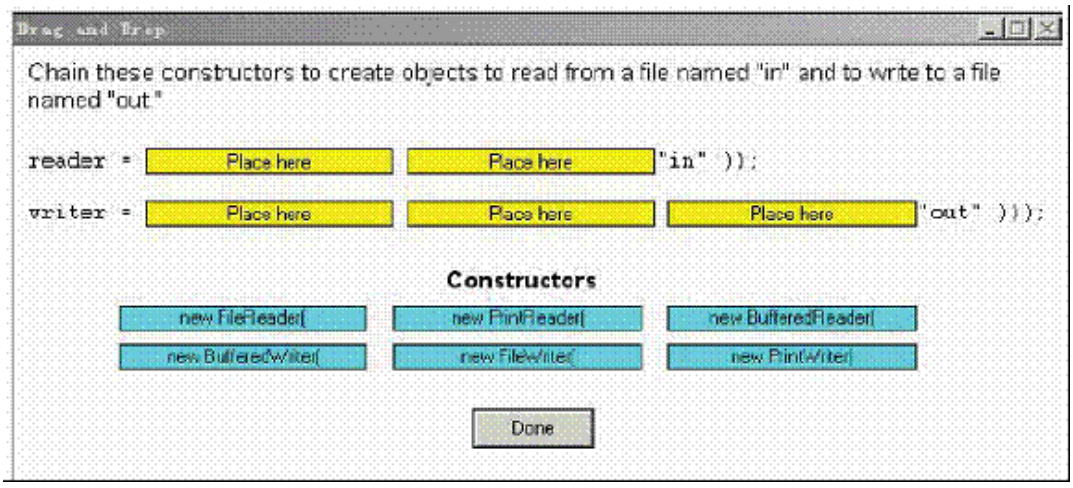


Answer:

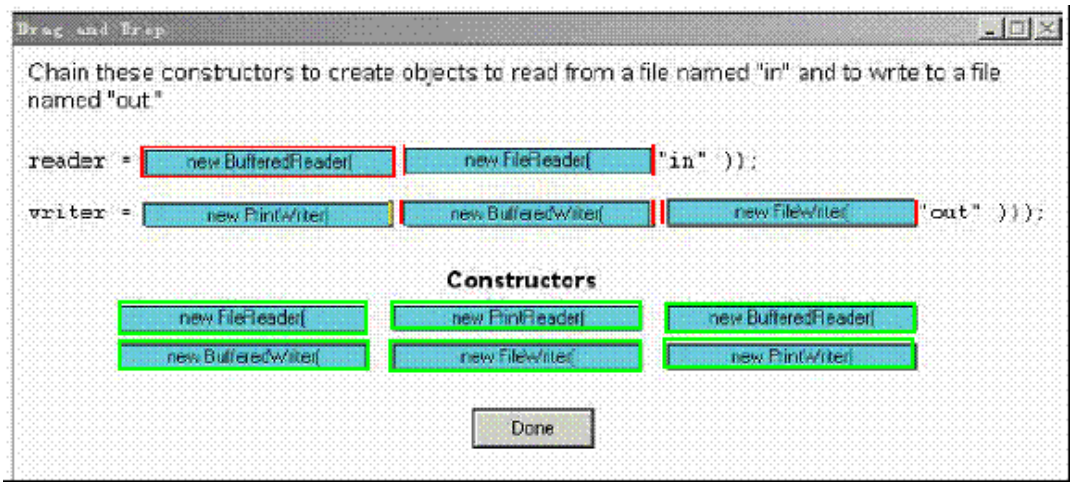


QUESTION NO: 290 DRAG DROP

Click the Task button.


Drag and Drop
Chain these constructors to create objects to read from a file named "in" and to write to a file named "out."
reader = Place here Place here "in"));
vriter = Place here Place here Place here "out")));
Constructors
new FileReader(
new PrintReader(
new BufferedReader(
new BufferedWriter(
new FileWriter(
new PrintWriter(
Done

Answer:


Drag and Drop
Chain these constructors to create objects to read from a file named "in" and to write to a file named "out."
reader = new BufferedReader(new FileReader("in"));
vriter = new PrintWriter(new BufferedWriter(new FileWriter("out")));
Constructors
new FileReader(
new PrintReader(
new BufferedReader(
new BufferedWriter(
new FileWriter(
new PrintWriter(
Done