};
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

QUESTION: 158
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

QUESTION: 159
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

QUESTION: 160
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

QUESTION: 161
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

QUESTION: 162
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

QUESTION: 163
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

QUESTION: 164
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

QUESTION: 165
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

QUESTION: 166
Given:
84. try {
85. ResourceConnection con = resourceFactory.getConnection();
86. Results r = con.query("GET INFO FROM CUSTOMER");
87. info = r.getData(); 88. con.close();
89. } catch (ResourceException re) {
90. errorLog.write(re.getMessage());
91. }
92. return info;
Which statement is true if a ResourceException is thrown on line 86?

A. Line 92 will not execute.
B. The connection will not be retrieved in line 85.
C. The resource connection will not be closed on line 88.
D. The enclosing method will throw an exception to its caller.

Answer: C

QUESTION: 167
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

QUESTION: 168
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

QUESTION: 169
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

QUESTION: 170
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

QUESTION: 171
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

QUESTION: 172
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

QUESTION: 173
Which can appropriately be thrown by a programmer using Java SE technology to create a desktop application?

A. ClassCastException
B. NullPointerException
C. NoClassDefFoundError
D. NumberFormatException
E. ArrayIndexOutOfBoundsException

Answer: D

QUESTION: 174
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

QUESTION: 175
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

QUESTION: 176

Given:
5. public class Tahiti {
6. Tahiti t;
7. public static void main(String[] args) {
8. Tahiti t = new Tahiti();
9. Tahiti t2 = t.go(t);
10. t2 = null;
11. // more code here
12. }
13. Tahiti go(Tahiti t) {
14. Tahiti t1 = new Tahiti(); Tahiti t2 = new Tahiti();
15. t1.t = t2; t2.t = t1; t.t = t2;
16. return t1;
17. }
18. }
When line 11 is reached, how many objects are eligible for garbage collection?

A. 0
B. 1
C. 2
D. 3
E. Compilation fails.

Answer: A

QUESTION: 177
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(); 12. Icelandic i3 = new Icelandic();
13. i3 = i1; i1 = i2; i2 = null; i3 = i1;
14. } 15. }
When line 14 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

QUESTION: 178
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

QUESTION: 179
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

QUESTION: 180
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

QUESTION: 181
Given:
15. public class Yippee {
16. public static void main(String [] args) {
17. for(int x = 1; x < args.length; x++) {
18. System.out.print(args[x] + " ");
19. }
20. }
21. }
and two separate command line invocations: java Yippee java Yippee 1 2 3 4 What is the result?

A. No output is produced. 1 2 3
B. No output is produced. 2 3 4
C. No output is produced. 1 2 3 4
D. An exception is thrown at runtime. 1 2 3
E. An exception is thrown at runtime. 2 3 4
F. An exception is thrown at runtime. 1 2 3 4

Answer: B

QUESTION: 182
Click the Exhibit button.
What is the output of the program shown in the exhibit?

```
10. class Foo {
11.   private int x;
12.   public Foo( int x ) { this.x = x; }
13.   public void setX( int x ) { this.x = x;
}
14.   public int getX() { return x; }
15. }
16.
17. public class Gamma {
18.
19.     static Foo fooBar( Foo foo ) {
20.       foo = new Foo( 100 );
21.       return foo;
22.     }
23.
24.     public static void main( String[] args
) {
25.     Foo foo = new Foo( 300 );
26.     System.out.print( foo.getX() + "-" );
27.
28.     Foo fooFoo = fooBar( foo );
29.     System.out.print( foo.getX() + "-" );
30.     System.out.print( fooFoo.getX() + "-"
);
31.
32.     foo = fooBar( fooFoo );
33.     System.out.print( foo.getX() + "-" );
34.     System.out.print( fooFoo.getX() );
35.     }
36. }
```

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

QUESTION: 183
Given classes defined in two different files:
1. package packageA;
2. public class Message {
3. String getText() { return "text"; }
4. }
And:
1. package packageB;
2. public class XMLMessage extends packageA.Message {
3. String getText() { return "<msg>text</msg>";}
4. public static void main(String[] args) {
5. System.out.println(new XMLMessage().getText());

6. }
7. }
What is the result of executing XMLMessage.main?

A. text
B. Compilation fails.
C. <msg>text</msg>
D. An exception is thrown at runtime.

Answer: B

QUESTION: 184
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

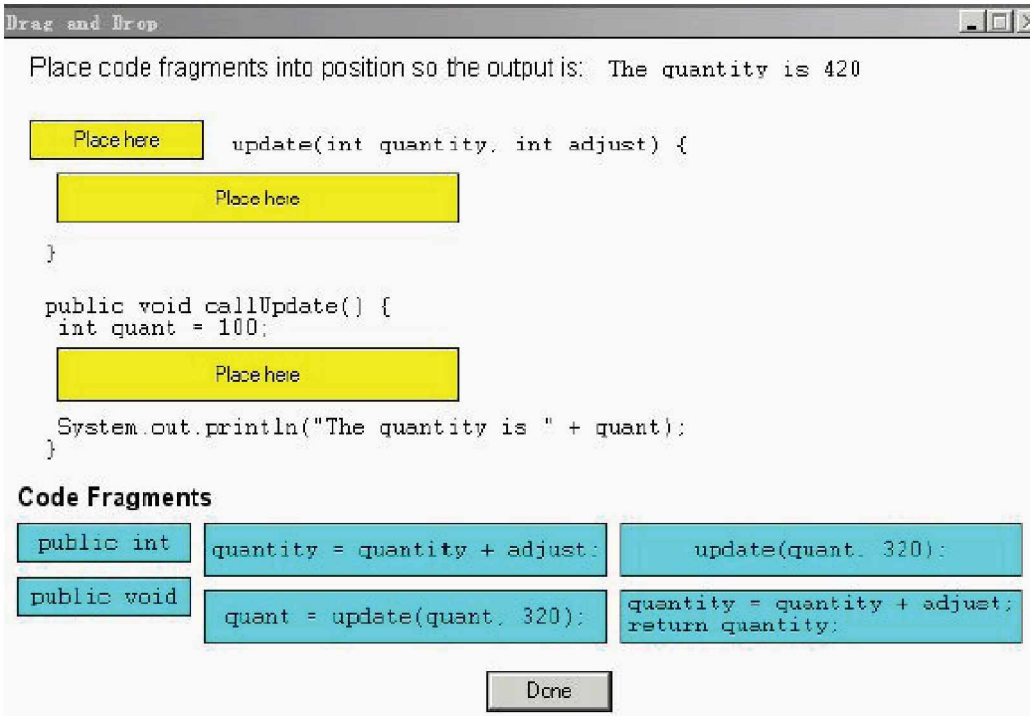
QUESTION: 185
Given:
1. package com.company.application;
2.
3. public class MainClass {

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.)

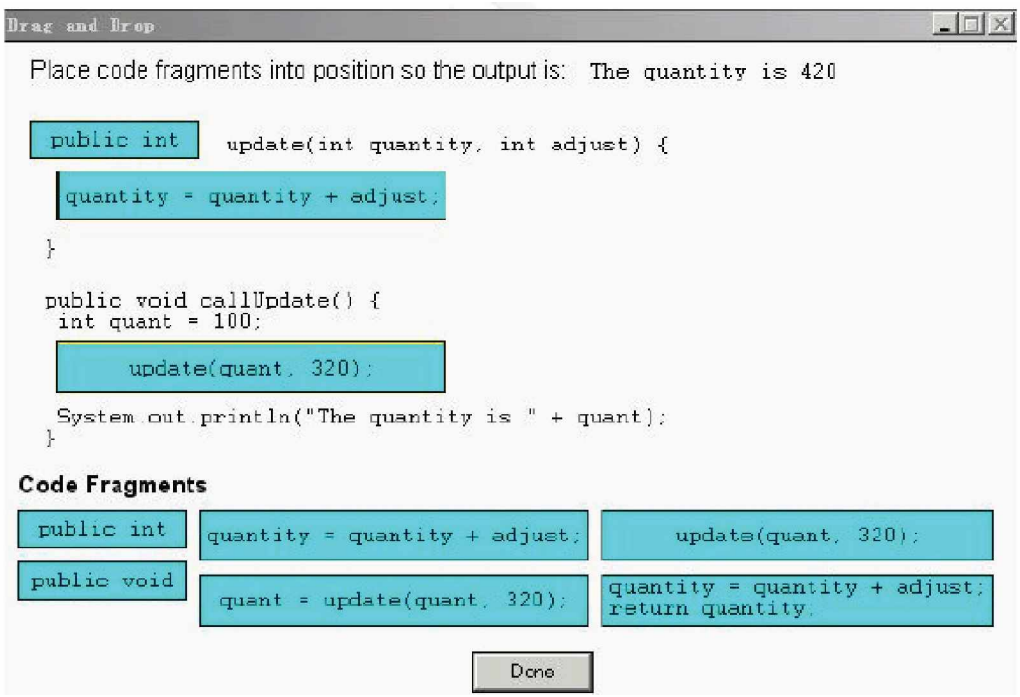
A. java MainClass if run from the /apps directory
B. java com.company.application.MainClass if run from the /apps directory
C. java -classpath /apps com.company.application.MainClass if run from any directory
D. java -classpath . MainClass if run from the /apps/com/company/application directory
E. java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

QUESTION: 186
Click the Task button.



Answer:



QUESTION: 187
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

QUESTION: 188
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

QUESTION: 189
Which three statements concerning the use of the java.io.Serializable interface are true? (Choose three.)

A. Objects from classes that use aggregation cannot be serialized.
B. An object serialized on one JVM can be successfully deserialized on a different JVM.
C. The values in fields with the volatile modifier will NOT survive serialization and deserialization.
D. The values in fields with the transient modifier will NOT survive serialization and deserialization.
E. It is legal to serialize an object of a type that has a supertype that does NOT implement java.io.Serializable.

Answer: B,D,E

QUESTION: 190
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

QUESTION: 191
Given that c is a reference to a valid java.io.Console object, which two code fragments read a line of text from the console? (Choose two.)

A. String s = c.readLine();
B. char[] c = c.readLine();
C. String s = c.readConsole();
D. char[] c = c.readConsole();
E. String s = c.readLine("%s", "name ");
F. char[] c = c.readLine("%s", "name ");

Answer: A,E

QUESTION: 192
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: 193
Given:
33. Date d = new Date(0);
34. String ds = "December 15, 2004";
35. // insert code here
36. try {
37. d = df.parse(ds);
38. }

39. catch(ParseException e) {
40. System.out.println("Unable to parse " + ds);
41. }
42. // insert code here too
What creates the appropriate DateFormat object and adds a day to the Date object?

A. 35. DateFormat df = DateFormat.getDateFormat();
42. d.setTime((60 * 60 * 24) + d.getTime());
B. 35. DateFormat df = DateFormat.getDateInstance();
42. d.setTime((1000 * 60 * 60 * 24) + d.getTime());
C. 35. DateFormat df = DateFormat.getDateFormat();
42. d.setLocalTime((1000*60*60*24) + d.getLocalTime());
D. 35. DateFormat df = DateFormat.getDateInstance();
42. d.setLocalTime((60 * 60 * 24) + d.getLocalTime());

Answer: B

QUESTION: 194
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

QUESTION: 195
Given: