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?

<br/>

<img src='./scjp/210.png'></img><br/>

A. Jar A

B. Jar B

C. Jar C

D. Jar D

E. Jar E

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

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]

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

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)".

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);

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.

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) {

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.

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.

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.

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();

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.

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\*/ }

}

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.

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

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.

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.

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.

229. Click the Exhibit button. What is the result?

<br/>

<img src='./scjp/229.png'></img><br/>

A. 4321

B. 0000

C. An exception is thrown at runtime.

D. Compilation fails because of an error in line 18.

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; }

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);

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.

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

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.

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

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

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.

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;

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.

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();

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();

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

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.

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

<br/>

<img src='./scjp/248.png'></img><br/>

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.

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.

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; }

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 \*/ }

,E

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;

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

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.

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.

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;

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

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.

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.

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

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.

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);

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.

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");

}

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

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.

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.

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.

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

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.

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.

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

<br/>

<img src='./scjp/271.png'></img><br/>

A. Compilation fails.

B. ClassC is displayed.

C. The code runs with no output.

D. An exception is thrown at runtime.

272. Click the Exhibit button.

Given:

<br/>

<img src='./scjp/272.png'></img><br/>

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.

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

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;

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 \*/ }

276. Given:

import java.util.\*;

public class G1 {

public void takeList(List<? extends String> list) {

// insert code here

}

}

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>();

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.

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.

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);

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.

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));

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.