

Given:

```
11. public interface Status{  
12. /* insert code here */ int MY_VALUE = 10;  
13. }
```

Which three are valid on line 12.?

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

El modificador native no existe, y no tiene sentido crear un objeto privado dentro de una interfaz ya que estas están pensadas para ser sobrescritas. No es posible declarar variables en una interfaz, sólo constantes que por tanto irán precedidas del modificador final. Dado que son constantes, no serán sobrescritas y por tanto no utilizaremos el modificador abstract. A, B, D

Which two code fragments correctly create and initialize a static array of 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}

static {a = new int[2]; a[0]=100; a[1]=200} es una forma muy poco común de inicializar un array estático. static final int[]a; static void init(){a = new int[3]; a[0]=100; a[1]=200} es incorrecto porque no es posible inicializar una variable final miembro desde un método. A, B

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

E

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");`

Para concatenar una String usamos el método "concat". Para concatenar un StringBuilder usamos el método "append".E

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 directory named newDir, containing a file f1.txt.

File(File parent, String child)

Creates a new **File** instance from a parent abstract pathname and a child pathname string.

mkdir()

Creates the directory named by this abstract pathname.

E

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

D

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[\\+”;

Escapamos el punto y el espacio en blanco que separan cada palabra. E

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();

El método “getInstance” de la clase “DateFormat” devuelve un objeto de la clase “DateFormat”.E

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

Para resolver este ejercicio es muy útil hacer un gráfico. Los objetos que se convierten en nulos y por tanto son elegibles por el recolector de basura son weight, i1, i2 e i3. E

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

En la línea 13 no estoy comparando con doble igual, sino con un simple igual. Un simple igual no conlleva comparación, sino asignación, luego la comparación no es posible. C

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); }
```

Cuando un método se llama a sí mismo es posible que nos metamos en un bucle infinito. El método doThree llama al método doOne, que llama al método doTwo que hace que doThree se esté llamando a sí mismo. D,F

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 properly.

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.

Do not use assertions to check the parameters of a public method. An assert is inappropriate because the method guarantees that it will always enforce the argument checks. It must check its arguments whether or not assertions are enabled. Further, the assert construct does not throw an exception of the specified type. It can throw only an

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("zero");
19. }
20. }
```

What is the result?

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

Falta el if en el else. D

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

D

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.

El ámbito de la variable i es solamente el bucle for. E

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.

D

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 12, 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.

No existe el método setLocale para la clase DateFormat. D

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.

Este ejercicio se ve claramente haciendo un gráfico de lo que está pasando. B

Given:

```
12. String csv = "Sue, 5, true, e";  
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.

Clase Scanner:

A simple text scanner which can parse primitive types and strings using regular expressions.

Ex:

```
Scanner sc = new Scanner(System.in);  
int i = sc.nextInt();
```

La cadena de texto no es convertible a entero.D

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.

E

Given:

```
25. A a = new A();  
26. System.out.println(a.doit(4,5));
```

What is the result?

```
1. public class A{  
2. public String doit(int x, int y){  
3. return "a";  
4. }  
5.  
6. public String doit(int ... vals){  
7. return "b";  
8. }  
9. }
```

- 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

A

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.

Un enum no es una clase ni un método. Es una lista de elementos. Adicionalmente, es posible añadirle métodos. Su primera línea debe hacer referencia a una lista de variables que serán públicas y estáticas por defecto. Su constructor siempre es privado. A

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.print(“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

La primera vez que ejecutamos (sin asserts) assertsOn es false y no se imprime nada. D

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.

C

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.

D

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.

C

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.

Al llamar a un método pasándole un valor de una primitiva, ya que lo que no le paso es la primitiva en sí, al salir del método la primitiva conservará su valor.B

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

```

B

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.

B

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.

A

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.println("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.

D

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

```

10. public class ClassA {
11. public void methodA(){
12. ClassB classB = new ClassB();
13. classB.getValue();
14. }
15. }

```

And:

```

20. class ClassB {
21. public ClassC classC;
22.
23. public String getValue(){
24. return classC.getValue();
25. }
26. }

```

And:

```

30. class ClassC {
31. public String value;
32.
33. public String getValue(){
34. value = "ClassB";
35. return value;
36. }
37. }

```

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

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;

D

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;

B

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 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 20000

C, F

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. a1b2c3
- E. Compilation fails.
- F. The code runs with no output.

`\\d` es la secuencia de escape para representar un número. A

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 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.

D

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.

B

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.

D

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. }
```

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

The label z is missing. G

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

B

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.

A

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

C

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");
s.delete(0, 3).replace(1, 3, "24").delete(4, 6);
- C.
StringBuffer s = new StringBuffer("123456789");
s.substring(3, 6).delete(1, 2).insert(1, "");
- D.
StringBuilder s = new StringBuilder("123456789");
s.substring(3, 6).delete(1, 2).insert(1, "24");
- E.
StringBuilder s = new StringBuilder("123456789");
s.delete(0, 3).delete(1, 3).delete(2, 5).insert(1, "24");

B, E

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[]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;}

A, B

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. }
11. }

```

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.

No puedo tener dos métodos con el mismo nombre, que reciban el mismo número de parámetros y devuelvan un tipo distinto de dato. C

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 AssertionError("value is null");
}`
- D. `if(value == null) {
throw new IllegalArgumentException("value is null");
}`

D

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.

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();
- C. return name.hashCode() + comment.hashCode()/2;
- D. return name.hashCode() + comment.hashCode()/2 - age*2;

B

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);

%[width][.precision]conversion

d is for integral types. In this example, the value being passed is a **double** which cannot be formatted as an integral type.**F**

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.

B

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));
```

B

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.

B