

## 1. What is the result?

```
public class Boxer1 {  
    Integer i;  
    int x;  
  
    public Boxer1(int y) {  
        x = i + y;  
        System.out.println(x);  
    }  
  
    public static void main(String[] args) {  
        new Boxer1(new Integer(4));  
    }  
}
```

```
public class Boxer1 {  
    Integer i = 0; // Inicializar i con 0  
    int x;  
  
    public Boxer1(int y) {  
        x = i + y;  
        System.out.println(x);  
    }  
    public static void main(String[] args) {  
        new Boxer1(new Integer(4));  
    }  
}
```

- 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.

2. How many times is 2 printed?

```
public static void main(String[] args) {  
    String[] table = {"aa", "bb", "cc"};  
    int ii = 0;  
    for (String ss : table) {  
        while (ii < table.length) {  
            System.out.println(ii); ii++;  
            break;  
        }  
    }  
}
```

- A. Zero.
- B. Once.
- C. Twice.
- D. Thrice.
- E. It is not printed because compilation fails.

3. ¿Cuál sería el resultado?

```
public class DoCompare4 {  
    public static void main(String[] args) {  
        String[] table = {"aa", "bb", "cc"};  
        int ii = 0;  
        do {  
            while (ii < table.length) {  
                System.out.println(ii++);  
            }  
        } while (ii < table.length);  
    }  
}
```

- a) 0
- b) 0 1 2 inicia en 0, se incrementa en 1 por lo que ya es 1 que sigue siendo menos que la longitud, se incrementa en 1 la i y ahora 2, por lo que sigue siendo menor a la longitud, por lo que imprime 012
- c)
- d) 0 1 2 0 1 2 0 1 2
- e) Compilation fails

#### 4. ¿Cuál sería el resultado?

```
public class DoCompare1 {  
    public static void main(String[] args) {  
        String[] table = {"aa", "bb", "cc"};  
        for (String ss : table) {  
            int ii = 0;  
            while (ii < table.length) {  
                System.out.println(ss + ", " + ii);  
                ii++;  
            }  
        }  
    }  
}
```

```
public class DoCompare1 {  
    public static void main(String[] args) {  
        String[] table = {"aa", "bb", "cc"};  
        for (String ss : table) {  
            int ii = 0;  
            while (ii < table.length) {  
                System.out.println(ss + ", " + ii);  
                ii++;  
            }  
        }  
    }  
}
```

- A) Zero.
- B) Once.
- C) Twice
- D) Thrice**
- E) Compilation fails

33.- 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.

```
class Foo {  
    public int a = 3;  
    public void addFive() { a += 5; System.out.print("f "); }  
}  
class Bar extends Foo {  
    public int a = 8;  
    public void addFive() { this.a += 5; System.out.print("b "); }  
}  
Invoked with:  
    Foo f = new Bar();  
    f.addFive();  
    System.out.println(f.a);
```

**R: b 3**

35.- What is printed out when the program is executed?

- A. - one.
- B. - two.
- C. - three.
- D. - four.
- E. - There is no output.

```
public class MainMethod {  
    void main() {  
        System.out.println("one");  
    }  
    static void main(String args) {  
        System.out.println("two");  
    }  
    public static final void main(String[] args) {  
        System.out.println("three");  
    }  
    void mina(Object[] args) {  
        System.out.println("four");  
    }  
}
```

**R: three**

49.- What is the result?

- A. 20
- B. 100
- C. 1000
- D. 2

```
public class Calculator {  
    int num = 100;  
    public void calc(int num) {  
        this.num = num * 10;  
    }  
    public void printNum(){  
        System.out.println(num);  
    }  
    public static void main(String[] args) {  
        Calculator obj = new Calculator ();  
        obj.calc(2);  
        obj.printNum();  
    }  
}
```

**R: 20**

50.- What three modifications, made independently, made to class Greet, enable the code to compile and run?

- A. Line 8 replaced with `handy.dandy.KeyStroke stroke = new KeyStroke();`
- B. Line 8 replaced with `handy.*.KeyStroke = new KeyStroke();`
- C. Line 8 replaced with `handy.dandy.KeyStroke stroke = new handy.dandy.KeyStroke();`
- D. `import handy.*;` added before line 1.
- E. `import handy.dandy.*;` added after line 1.
- F. `import handy.dandy.KeyStroke;` added after line 1.
- G. `import handy.dandy.KeyStroke.typeExclamation();` added after line 1.

```
package handy.dandy;  
public class KeyStroke {  
    public void typeExclamation() {  
        System.out.println("!");  
    }  
}
```

And:

```
01. package handy;  
02.  
03.  
04. public class Greet {  
05.     public static void main(String[] args) {  
06.         String greeting = "Hello";  
07.         System.out.print(greeting);  
08.         KeyStroke stroke = new KeyStroke();  
09.         stroke.typeExclamation();  
10.     }  
11. }
```

**R: import handy.dandy.\*; added after line 1**

**Line 8 replaced with handy.dandy.KeyStroke stroke=new handy.dandy.KeyStroke();**

**import handy.dandy.KeyStroke; added after line 1.**