

1. What is output by the following code? (Choose all that apply.)

```
1: public class Fish {  
2:     public static void main(String[] args) {  
3:         int numFish = 4;  
4:         String fishType = "tuna";  
5:         String anotherFish = numFish + 1;  
6:         System.out.println(anotherFish + " " + fishType);  
7:         System.out.println(numFish + " " + 1);  
8:     } }
```

- A. 4 1
- B. 5
- C. 5 tuna
- D. 5tuna
- E. 51tuna
- F. The code does not compile.

La respuestas son B, C

La respuesta correcta es F ya que en la linea 5 anotherFish es un String y no un int aunque este operando ints

2. Which of these array declarations are not legal? (Choose all that apply.)

- A. `int[][] scores = new int[5][];`
- B. `Object[][][] cubbies = new Object[3][0][5];`
- C. `String beans[] = new beans[6];`
- D. `java.util.Date[] dates[] = new java.util.Date[2][];`
- E. `int[][] types = new int[];`
- F. `int[][] java = new int[][];`

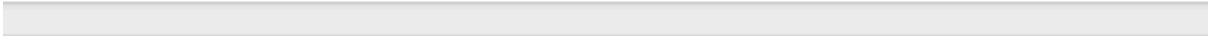
A, B, F son las que escojo

Las repuestas correctas son C,D,E

3. Note that March 13, 2022 is the weekend when we spring forward, and November 6, 2022 is when we fall back for daylight saving time. Which of the following can fill in the blank without the code throwing an exception? (Choose all that apply.)

```
var zone = ZoneId.of("US/Eastern");  
var date = _____;  
var time = LocalTime.of(2, 15);  
var z = ZonedDateTime.of(date, time, zone);
```

- A. `LocalDate.of(2022, 3, 13)`
- B. `LocalDate.of(2022, 3, 40)`
- C. `LocalDate.of(2022, 11, 6)`



Review Questions

- D. `LocalDate.of(2022, 11, 7)`
- E. `LocalDate.of(2023, 2, 29)`
- F. `LocalDate.of(2022, MonthEnum.MARCH, 13);`

A si compila

B arroja una excepción

C compila

D compila

E arroja error

F tampoco compila

la respuesta es A, C, D

4. Which of the following are output by this code? (Choose all that apply.)

```
3: var s = "Hello";  
4: var t = new String(s);  
5: if ("Hello".equals(s)) System.out.println("one");  
6: if (t == s) System.out.println("two");  
7: if (t.intern() == s) System.out.println("three");  
8: if ("Hello" == s) System.out.println("four");  
9: if ("Hello".intern() == t) System.out.println("five");
```

- A. one
- B. two
- C. three
- D. four
- E. five
- F. The code does not compile.
- G. None of the above

Las respuestas son A, C, D

5. What is the result of the following code?

```
7: var sb = new StringBuilder();  
8: sb.append("aaa").insert(1, "bb").insert(4, "ccc");  
9: System.out.println(sb);
```

- A. abbaaccc
- B. abbaccca
- C. bbaaaccc
- D. bbaaccca
- E. An empty line
- F. The code does not compile.

seria D

SI funciona porque te regresa un StringBuilder

6. How many of these lines contain a compiler error? (Choose all that apply.)

```
23: double one = Math.pow(1, 2);
```

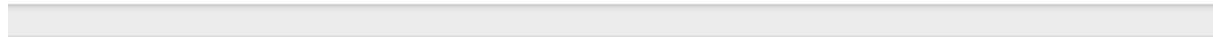
```
24: int two = Math.round(1.0);
```

```
25: float three = Math.random();
```

```
26: var doubles = new double[] {one, two, three};
```

A. 0

B. 1



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C. 2

D. 3

E. 4

La respuesta es C lo puse en el IDE

7. Which of these statements is true of the two values? (Choose all that apply.)

2022-08-28T05:00 GMT-04:00

2022-08-28T09:00 GMT-06:00

- A.** The first date/time is earlier.
- B.** The second date/time is earlier.
- C.** Both date/times are the same.
- D.** The date/times are two hours apart.
- E.** The date/times are six hours apart.
- F.** The date/times are 10 hours apart.

Las respuestas son A, E para trabajar con las horas según el libro gmt es las horas que sobran de un horario a otro entonces en el primero serian las 9 y en el segundo las 15 horas entonces se llevan por 6 horas y el primero es mas temprano

8. Which of the following return 5 when run independently? (Choose all that apply.)

```
var string = "12345";
```

```
var builder = new StringBuilder("12345");
```

- A.** `builder.charAt(4)`
- B.** `builder.replace(2, 4, "6").charAt(3)`
- C.** `builder.replace(2, 5, "6").charAt(2)`
- D.** `string.charAt(5)`
- E.** `string.length`
- F.** `string.replace("123", "1").charAt(2)`
- G.** None of the above

G porque no se están definiendo bien checar bien que es un var no un String directamente
La respuesta correcta era la A, B, F esos métodos regresan 5 ya sea en caracter o en int

9. Which of the following are true about arrays? (Choose all that apply.)
- A. The first element is index 0.
 - B. The first element is index 1.
 - C. Arrays are fixed size.
 - D. Arrays are immutable.
 - E. Calling `equals()` on two different arrays containing the same primitive values always returns `true`.
 - F. Calling `equals()` on two different arrays containing the same primitive values always returns `false`.
 - G. Calling `equals()` on two different arrays containing the same primitive values can return `true` or `false`.

La respuesta es A, C, F

10. How many of these lines contain a compiler error? (Choose all that apply.)

```
23: int one = Math.min(5, 3);  
24: long two = Math.round(5.5);  
25: double three = Math.floor(6.6);  
26: var doubles = new double[] {one, two, three};
```

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

C La respuesta correcta era A todas estas lineas compilan

11. What is the output of the following code?

```
var date = LocalDate.of(2022, 4, 3);  
date.plusDays(2);  
date.plusHours(3);  
System.out.println(date.getYear() + " " + date.getMonth()  
    + " " + date.getDayOfMonth());
```

- A.** 2022 MARCH 4
- B.** 2022 MARCH 6
- C.** 2022 APRIL 3
- D.** 2022 APRIL 5
- E.** The code does not compile.
- F.** A runtime exception is thrown.

C La respuesta correcta es E ya que LocalDate no tiene elemento de horas entonces no puede definir ese metodo

12. What is output by the following code? (Choose all that apply.)

```
var numbers = "012345678".indent(1);  
numbers = numbers.stripLeading();  
System.out.println(numbers.substring(1, 3));  
System.out.println(numbers.substring(7, 7));  
System.out.print(numbers.substring(7));
```

- A.** 12
- B.** 123
- C.** 7
- D.** 78
- E.** A blank line
- F.** The code does not compile.
- G.** An exception is thrown.

La respuesta es A 12 y D 78

indent y stripLeading son metodos que uno agrega espacios y el otro los quita
y el funcionamiento de number.substring (el índice donde inicia y el indice donde acaba)
entonces falto 1 respuesta que fue la E ya que (7,7) es el mismo indice es una linea en
blanco

13. What is the result of the following code?

```
public class Lion {  
    public void roar(String roar1, StringBuilder roar2) {  
        roar1.concat("!!!");  
        roar2.append("!!!");  
    }  
    public static void main(String[] args) {  
        var roar1 = "roar";  
        var roar2 = new StringBuilder("roar");  
        new Lion().roar(roar1, roar2);  
        System.out.println(roar1 + " " + roar2);  
    } }  
}
```

- A.** roar roar
- B.** roar roar!!!
- C.** roar!!! roar
- D.** roar!!! roar!!!
- E.** An exception is thrown.
- F.** The code does not compile.

La respuesta es la B

14. Given the following, which can correctly fill in the blank? (Choose all that apply.)

```
var date = LocalDate.now();  
var time = LocalTime.now();  
var dateTime = LocalDateTime.now();  
var zoneId = ZoneId.systemDefault();  
var zonedDateTime = ZonedDateTime.of(dateTime, zoneId);  
Instant instant = _____;
```

- A.** `Instant.now()`
- B.** `new Instant()`
- C.** `date.toInstant()`
- D.** `dateTime.toInstant()`
- E.** `time.toInstant()`
- F.** `zonedDateTime.toInstant()`

A si

B no

C no

D no

E no

F si El toInstant solo es con zonedDateTime

15. What is the output of the following? (Choose all that apply.)

```
var arr = new String[] { "PIG", "pig", "123"};  
Arrays.sort(arr);  
System.out.println(Arrays.toString(arr));  
System.out.println(Arrays.binarySearch(arr, "Pippa"));
```

Review

- A.** [pig, PIG, 123]
- B.** [PIG, pig, 123]
- C.** [123, PIG, pig]
- D.** [123, pig, PIG]
- E.** -3
- F.** -2
- G.** The results of `binarySearch()` are undefined in this example.

La respuesta es C, E

16. What is included in the output of the following code? (Choose all that apply.)

```
var base = "ewe\nsheep\\t";  
int length = base.length();  
int indent = base.indent(2).length();  
int translate = base.translateEscapes().length();  
  
var formatted = "%s %s %s".formatted(length, indent, translate);  
System.out.format(formatted);
```

- A.** 10
- B.** 11
- C.** 12
- D.** 13
- E.** 14
- F.** 15
- G.** 16

La respuesta es A B G

17. Which of these statements are true? (Choose all that apply.)

```
var letters = new StringBuilder("abcdefg");
```

- A.** `letters.substring(1, 2)` returns a single-character `String`.
- B.** `letters.substring(2, 2)` returns a single-character `String`.
- C.** `letters.substring(6, 5)` returns a single-character `String`.
- D.** `letters.substring(6, 6)` returns a single-character `String`.
- E.** `letters.substring(1, 2)` throws an exception.
- F.** `letters.substring(2, 2)` throws an exception.
- G.** `letters.substring(6, 5)` throws an exception.
- H.** `letters.substring(6, 6)` throws an exception.

La respuesta es A, G

18. What is the result of the following code? (Choose all that apply.)

```
13: String s1 = ""  
14:     purr"";
```

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```
15: String s2 = "";  
16:  
17: s1.toUpperCase();  
18: s1.trim();  
19: s1.substring(1, 3);  
20: s1 += "two";  
21:  
22: s2 += 2;  
23: s2 += 'c';  
24: s2 += false;  
25:  
26: if ( s2 == "2cfalse") System.out.println("==");  
27: if ( s2.equals("2cfalse")) System.out.println("equals");  
28: System.out.println(s1.length());
```

- A. 2
- B. 4
- C. 7
- D. 10
- E. ==
- F. equals
- G. An exception is thrown.
- H. The code does not compile.

La respuesta es C, F

19. Which of the following fill in the blank to print a positive integer? (Choose all that apply.)

```
String[] s1 = { "Camel", "Peacock", "Llama"};
String[] s2 = { "Camel", "Llama", "Peacock"};
String[] s3 = { "Camel"};
String[] s4 = { "Camel", null};
System.out.println(Arrays._____);
```

- A. compare(s1, s2)
- B. mismatch(s1, s2)
- C. compare(s3, s4)
- D. mismatch (s3, s4)
- E. compare(s4, s4)
- F. mismatch (s4, s4)

A, B, D, E

El método compare() devuelve un número entero positivo cuando los arreglos son diferentes y el primero es más grande. La E devuelve cero y nos están preguntando por enteros positivos

20. Note that March 13, 2022 is the weekend that clocks spring ahead for daylight saving time. What is the output of the following? (Choose all that apply.)

```
var date = LocalDate.of(2022, Month.MARCH, 13);
var time = LocalTime.of(1, 30);
var zone = ZoneId.of("US/Eastern");
var dateTime1 = ZonedDateTime.of(date, time, zone);
var dateTime2 = dateTime1.plus(1, ChronoUnit.HOURS);

long diff = ChronoUnit.HOURS.between(dateTime1, dateTime2);
int hour = dateTime2.getHour();
boolean offset = dateTime1.getOffset()
    == dateTime2.getOffset();
System.out.println("diff = " + diff);
System.out.println("hour = " + hour);
System.out.println("offset = " + offset);
```

- A. diff = 1
- B. diff = 2
- C. hour = 2
- D. hour = 3
- E. offset = true
- F. The code does not compile.
- G. A runtime exception is thrown.

A, D Son las respuestas

21. Which of the following can fill in the blank to print avaJ? (Choose all that apply.)

```
3: var puzzle = new StringBuilder("Java");
```

```
4: puzzle._____;
```

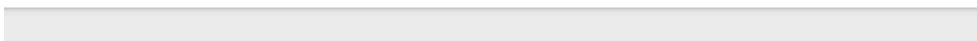
```
5: System.out.println(puzzle);
```

- A.** `reverse()`
- B.** `append("vaJ$").substring(0, 4)`
- C.** `append("vaJ$").delete(0, 3).deleteCharAt(puzzle.length() - 1)`
- D.** `append("vaJ$").delete(0, 3).deleteCharAt(puzzle.length())`
- E.** None of the above

La respuesta es A, C

22. What is the output of the following code?

```
var date = LocalDate.of(2022, Month.APRIL, 30);  
date.plusDays(2);  
date.plusYears(3);  
System.out.println(date.getYear() + " " + date.getMonth()  
    + " " + date.getDayOfMonth());
```



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- A.** 2022 APRIL 30
- B.** 2022 MAY 2
- C.** 2025 APRIL 2
- D.** 2025 APRIL 30
- E.** 2025 MAY 2
- F.** The code does not compile.
- G.** A runtime exception is thrown.

E


La respuesta correcta es A ya que las clases date son inmutables

22. What is the output of the following code?

```
var date = LocalDate.of(2022, Month.APRIL, 30);  
date.plusDays(2);  
date.plusYears(3);  
System.out.println(date.getYear() + " " + date.getMonth()  
    + " " + date.getDayOfMonth());
```

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- A.** 2022 APRIL 30
- B.** 2022 MAY 2
- C.** 2025 APRIL 2
- D.** 2025 APRIL 30
- E.** 2025 MAY 2
- F.** The code does not compile.
- G.** A runtime exception is thrown.

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