

StringBuilder

Direct Questions

1. What is the primary advantage of using `StringBuilder` over `String`?
 - A) It is immutable
 - B) It consumes more memory
 - C) It allows mutable strings
 - D) It is slower than `String`
 - **Answer: C**
2. Which method is used to append a string in `StringBuilder`?
 - A) `add()`
 - B) `append()`
 - C) `join()`
 - D) `include()`
 - **Answer: B**
3. How can you reverse the contents of a `StringBuilder`?
 - A) `inverse()`
 - B) `backward()`
 - C) `reverse()`
 - D) `flip()`
 - **Answer: C**
4. Which method returns the length of a `StringBuilder`?
 - A) `size()`
 - B) `length()`
 - C) `getLength()`
 - D) `count()`
 - **Answer: B**
5. `StringBuilder` belongs to which package?

- A) java.util
- B) java.io
- C) java.lang
- D) java.string
- **Answer: C**

Scenario-Based Questions

6. You are building a report by concatenating multiple strings inside a loop. Which class provides better performance?

- A) String
- B) StringBuilder
- C) StringBuffer
- D) Arrays
- **Answer: B**

7. After appending values "Hello" and "World" using `StringBuilder`, what will be the result?

```
StringBuilder sb = new StringBuilder();
```

8. `sb.append("Hello");`

9. `sb.append("World");`

10. `System.out.println(sb);`

- A) Hello World
- B) HelloWorld
- C) WorldHello
- D) Error
- **Answer: B**

11. How do you insert a string "Java" at index 4 in a `StringBuilder` object initialized with "HelloWorld"?

- A) `insert(4, "Java")`
- B) `add(4, "Java")`
- C) `put(4, "Java")`
- D) `append(4, "Java")`
- **Answer: A**

12. Which method deletes characters from index 2 to 5 in a `StringBuilder`?

- A) `delete(2, 5)`
- B) `remove(2, 5)`
- C) `erase(2, 5)`
- D) `clear(2, 5)`
- **Answer: A**

13. You want to replace a portion of a string using `StringBuilder`. Which method should you use?

- A) `setValue()`
- B) `replace()`
- C) `change()`
- D) `modify()`
- **Answer: B**

String API

Direct Questions

1. Which method is used to get the character at a specific index?

- A) `charAt()`
- B) `getChar()`
- C) `indexOf()`
- D) `substring()`
- **Answer: A**

2. What does the `equals()` method do in `String` class?

- A) Compares references
- B) Compares content
- C) Checks length
- D) Returns ASCII values
- **Answer: B**

3. Which method converts a string to lower case?

- A) toLowerCase()
- B) lower()
- C) downCase()
- D) changeCase()
- **Answer: A**

4. How do you split a string into an array?

- A) divide()
- B) separate()
- C) split()
- D) tokenize()
- **Answer: C**

5. What is the output of "Java".substring(1,3)?

- A) Ja
- B) av
- C) va
- D) Error
- **Answer: B**

Scenario-Based Questions

6. You want to find the index of the word "world" in the string "Hello world". Which method will you use?

- A) contains()
- B) find()
- C) indexOf("world")
- D) substring()
- **Answer: C**

7. How would you compare two strings ignoring their case?

- A) equals()

- B) compareTo()
 - C) equalsIgnoreCase()
 - D) match()
 - **Answer: C**
8. You have a string with leading and trailing spaces. Which method removes them?
- A) strip()
 - B) trim()
 - C) clear()
 - D) removeSpaces()
 - **Answer: B**
9. What is the result of `"Hello".concat("World")`?
- A) Hello World
 - B) HelloWorld
 - C) WorldHello
 - D) Error
 - **Answer: B**
10. You want to convert "123" into an integer. Which class/method is used?
- A) String.toInt()
 - B) Integer.parseInt("123")
 - C) parse("123")
 - D) stringToInt("123")
 - **Answer: B**

Date, Time, and Numeric Objects

Direct Questions

1. Which class is used to get current date and time in Java 8?
- A) DateTime
 - B) LocalDateTime

- C) Calendar
- D) Clock
- **Answer: B**

2. What method returns the current system date?

- A) now()
- B) today()
- C) currentDate()
- D) getDate()
- **Answer: A**

3. Which package contains the modern date and time API?

- A) java.util
- B) java.sql
- C) java.time
- D) java.date
- **Answer: C**

4. Which class is used for formatting dates?

- A) DateFormatter
- B) SimpleDateFormat
- C) DateParser
- D) DateFormat
- **Answer: B**

5. How do you represent a specific date in Java?

- A) new Date("2023-12-01")
- B) LocalDate.of(2023, 12, 1)
- C) createDate(2023, 12, 1)
- D) new LocalDate(2023, 12, 1)
- **Answer: B**

Scenario-Based Questions

6. You want to calculate the number of days between two dates. Which class helps?

- A) ChronoUnit
- B) Duration
- C) Period
- D) Both A and C
- **Answer: D**

7. To represent time without date, which class should be used?

- A) Date
- B) LocalDate
- C) LocalTime
- D) Calendar
- **Answer: C**

8. What is the output of `LocalTime.now().getHour()`?

- A) Current hour in 24-hour format
- B) Hour in 12-hour format
- C) Minutes only
- D) Seconds only
- **Answer: A**

9. You want to parse a date string "2025-07-26". Which class is suitable?

- A) `LocalDate.parse("2025-07-26")`
- B) `Date.valueOf("2025-07-26")`
- C) `DateTimeFormatter.parse("2025-07-26")`
- D) `Date.parse("2025-07-26")`
- **Answer: A**

10. How do you get the current year?

- A) `LocalDate.now().getYear()`
- B) `Date.getYear()`
- C) `Calendar.getYear()`

- D) now().year()
- **Answer: A**