# CompSciStudyGuide - 20 Trivia Questions

### 1. JSON File

- Question: Which library is commonly used in Java to parse JSON data?
  - A) org.json
  - B) Java.io
  - C) JSON.Parse
  - D) Java.util
- Answer: A) org.json

### 2. JSON File

- Question: What data structure does JSON primarily use to represent data?
  - A) ArrayList
  - B) Key-Value Pairs
  - C) LinkedList
  - D) Tree
- Answer: B) Key-Value Pairs

### 3. ArrayList / LinkedList

- Question: Which operation is faster in a LinkedList than in an ArrayList?
  - A) Random Access
  - B) Insertion at the beginning
  - C) Removal from the end
  - D) Accessing the middle element
- Answer: B) Insertion at the beginning

# 4. ArrayList / LinkedList- Question: Which collection type allows random access in Java?- A) LinkedList

- B) ArrayList
- C) HashMap
- D) TreeSet
- Answer: B) ArrayList

### 5. API

- Question: What HTTP method is commonly used to retrieve data from an API?
  - A) POST
  - B) GET
  - C) PUT
  - D) DELETE
- Answer: B) GET

### 6. API

- Question: What does API stand for?
  - A) Application Programming Interface
  - B) Automated Program Interface
  - C) Application Parsing Interface
  - D) Automated Parsing Integration
- Answer: A) Application Programming Interface

### 7. Examples of 3rd Party Libraries

- Question: Which library would you use to simplify JSON parsing in Java?

- A) Gson
- B) Log4j
- C) Swing
- D) JUnit
- Answer: A) Gson
8. Examples of 3rd Party Libraries
- Question: Which Java library is commonly used for logging?
- A) JUnit
- B) Log4j
- C) Gson
- D) Swing
- Answer: B) Log4j
9. Java Collections Framework
- Question: Which interface does HashMap implement in the Java Collections Framework?
- A) Set
- B) List
- C) Map
- D) Collection
- Answer: C) Map
10. Java Collections Framework
- Question: Which class is part of the Set interface in Java?
- A) ArrayList
- B) TreeSet

- C) HashMap - D) LinkedList - Answer: B) TreeSet 11. Text-Based Adventure Games - Question: Which OOP principle allows an object to take on many forms? - A) Inheritance - B) Encapsulation - C) Polymorphism - D) Abstraction - Answer: C) Polymorphism 12. Text-Based Adventure Games - Question: In Java, which keyword is used to create a subclass? - A) subclass - B) super - C) extends - D) class - Answer: C) extends 13. LeetCode Problems - TwoSum - Question: Which data structure is used to optimize the TwoSum solution? - A) ArrayList - B) Stack - C) HashMap - D) Queue

- Answer: C) HashMap
14. LeetCode Problems - Roman Integer
- Question: What is the integer value of the Roman numeral "IX"?
- A) 7
- B) 9
- C) 11
- D) 10
- Answer: B) 9
15. LeetCode Problems - Longest Common Prefix
- Question: What is the longest common prefix of ["flower", "flow", "flight"]?
- A) "f"
- B) "flo"
- C) "fl"
- D) "flower"
- Answer: C) "fl"
16. LeetCode Problems - Merge Two Sorted Lists
- Question: What is the purpose of the dummy node in the solution?
- A) It stores the final answer
- B) It initializes the list
- C) It simplifies pointer manipulation
- D) It is not necessary
- Answer: C) It simplifies pointer manipulation

# 17. JSON File

- Question: What is JSON commonly used for in web development? - A) CSS Styling - B) Data Exchange - C) Image Compression - D) Database Management - Answer: B) Data Exchange 18. ArrayList / LinkedList - Question: Which Java collection allows duplicate elements? - A) Set - B) List - C) Map - D) TreeSet - Answer: B) List 19. API - Question: In REST API, which method is used to update data on a server? - A) GET - B) POST - C) PUT - D) DELETE - Answer: C) PUT

# 20. Java Collections Framework

- Question: Which collection type is ordered but does not allow duplicate elements?

- A) HashSet
- B) ArrayList
- C) LinkedHashSet
- D) TreeMap
- Answer: C) LinkedHashSet