- 1. What is a package in Java? What's the actual need for it?
- 2. What is Class?
- 3. What is an Object? How is it different from Class?
- 4. What is an access modifier in Java? What are they & what's the use of it?
- 5. Overloading
- 6. What are primitive types?
- 7. String immutable, SCP & String intern();
- 8. Read Java API docs Object (1.8 or jdk8). What's the significance of this class?
- 9. Object hashcode & equals methods importance & details.
- 10. Importance of toString() method of Object class.
- 11. try-catch-finally
- 12. Closeable & Autocloseable
- 13. try with resources.
- 14. Exception Handling in detail.
 - 1. Throwable
 - 2. java.lang.Error
 - 3. java.lang.Exception
 - 4. Error vs Exception
 - 5. Checked & unchecked Exceptions
 - 6. Throws
 - 7. Chained Exceptions
 - 8. Cause
 - 9. User defined Exception or Custom Exception.
- 15. What is NullPointerException? Is it good to catch that exception?
- 16. What are instance variables & instance methods?
- 17. What are static variables & static methods? What's the significance?
- 18. Inheritance
- 19. Interface & Default Methods.
- 20. Overriding. Explore about @override annotations as well.
- 21. Runtime and compile time polymorphism
- 22. Abstract class vs Class
- 23. Abstract class vs Interface.
- 24. Data Structures:

Hint: Refer <u>Java Docs</u> & usage:

- a. Collection
- b. Arrays, ArrayList, Vector
- c. Set, Hashtable, Properties, HashMap

d. <u>LinkedHashMap</u>

- 25. Generics
- 26. Enum Types
- 27. POJO class & it's significance.
- 28. Types of For Loops & syntax.
- 29. Object Cloning
- 30. BufferedReader vs InputStreamReader, BufferedWriter vs OutputStreamWriter
- 31. Inner Classes & Anonymous Classes
- 32. Method Reference
- 33. Autoboxing & Unboxing
- 34. Varargs
- 35. Reflection
- 36. <u>Regular Expression</u> in java (<u>Pattern</u>, Matcher etc)
- 37. Hashing Algorithms
- 38. Hashing internals of Hashmap.
- 39. Threads & Runnable
- 40. Synchronization & locks