1. Introduction to reference data types
2. Reference variables and methods
3. Difference between reference data types and primitive data types
4. Difference between reference variable and static variable
5. Re-assigning a reference variable
6. Passing reference variable to method
7. Initializing reference variable of different class
8. Encapsulation
9. Upcasting & downcasting of a reference variable
10. New interface features (Java 8 & above)
11. Arrays
12. Enumerations
13. Packages and import statements
14. Static imports
15. String class, StringBuffer & StringBuilder class
16. **Exception** hierarchy, Errors, Checked and un-checked exceptions
17. Exception propagation
18. try-catch-finally block , throws clause and throw keyword, Multi catch block
19. Creating user defined checked and unchecked exceptions
20. **java.io & java.nio Package**
    - Brief introduction to InputStream, OutputStream, Reader and Writer interfaces
    - NIO package
    - Serialization and de-serialization
    - Shallow copy and deep copy
21. **Object Class & java.util Package**
    - Date, DateTime, Calendar class
    - Converting Date to String and String to Date using SimpleDateFormat class
    - Object Class: Overriding to String, equals & hashcode method
22. **Collection**s
    - Introduction to collections: Collection hierarchy
    - List, Queue, Set and Map Collections
    - List Collection: ArrayList, LinkedList
    - Vector (insert, delete, search, sort, iterate, replace operations)
    - Collections class
    - Comparable and Comparator interfaces
    - Queue collection
    - Set Collection: HashSet, LinkedHashSet & TreeSet collection
    - Backed set collections
    - Map Collection: HashTable, HashMap, LinkedHashMap & TreeMap classes
    - Backed Map collections
23. Generics
24. Concurrent collections
25. **MultiThreading**
    - Synchronization
    - Deadlock
    - Wait, notify and notifyAll methods
    - Producer & Consumer problem
26. Inner Class (Regular, Method local, Anonymous & static inner class)
27. Lambada Expression
28. Reflection