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| **Java Memory Management**  Heap and Stack difference  How memory is free  What is object and reference  Reference types  Atomic values  JVM options -xms -xmx | **Date time API**  Practice:  LocalDate, LocalDateTime, LocalTime  Difference between dates  Different formats  Timezone | **Basic**  Difference | and ||  XOR vs OR  Bitwise operations  Data types  Autoboxing |
| **Java modules**  module-info.java vs package-info.java  Compile vs Runtime  Name all module operations and describe | **Collections**  Array vs ArrayList | **Class loaders**  What is it  Java.lang.ClassLoader.loadClass() |
| **Java assertions**  What is it ?  By default turned off | **Inheritance, Composition**  Difference Inheritance vs Composition  Association, Aggregation, Composition  Dependency injection  Tight coupled  Override vs overload difference  Listko Substitution Principle | **Volatile, Synchronized**  What is difference ?  Describe volatila  Describe synchronized  + write thread digram |
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