

1. Classes, objects, data types
  - a. For loop types (3) `
  - b. Constructors `
  - c. What is an iterable **Interface** `
  - d. Encapsulation `
  - e. Constructors `
  - f. Static , non static methods
2. Extending Classes, inheritance, abstract classes and interfaces
  - a. Super **Fathers objects and fathers constructor** `
  - b. Overloading and overriding `
  - c. Function and interface may have default methods `
  - d. Anonymous classes 3 types how to make `
  - e. Local class is inner class declared inside a block `
  - f. Outer objects `
  - g. Interface may have colliding default methods `
  - h. Access modifiers `
  - i. Abstract classes `
3. Exception handling
  - a. Exception vs error`
  - b. How to point where an exception occurred, print a message with when exception raised `
4. Threads
  - a. Life cycle of a thread `
  - b. How to start and stop a thread`
  - c. How to create a thread with overriding and runnable `
  - d. Default method in runnable thread `
  - e. Does thread implement runnable ? **Yes, we only need a run method to implement runnable** `
  - f. How to stop a thread? **Intereput**
  - g. How to throw an interruptedexception`
  - h. Notify `
  - i. Notify all`
  - j. Illegal monitor exception `
  - k. How does a thread notify another thread? **T. notify, and a random thread is chosen** `
  - l. Deadlocks `
  - m. Thread starvation `
  - n. Volatile
5. Lambda expression, generics and reflection
  - a. Functional Interface **An interface with one abstract method** `
  - b. How to write a lambda function `
  - c. Implement interface on fly using lambda expressions`
  - d. Stack using reflections `

- e. Classes in reflection package `
- f. Object of generic type without instantiating the generic variable
- g. Generic type `