Section 10: Streams and Parallel Streams in depth

Preview

Streams Introduction

Observing the Stream

Stream Pipeline

Streams are not data Containers

Filter Operations

Map Operations

Reduce Operations

Streams are Lazy

Numeric Streams

Numeric Streams - Methods

Bounded Streams

Infinite Streams

Stream.of and FlatMap

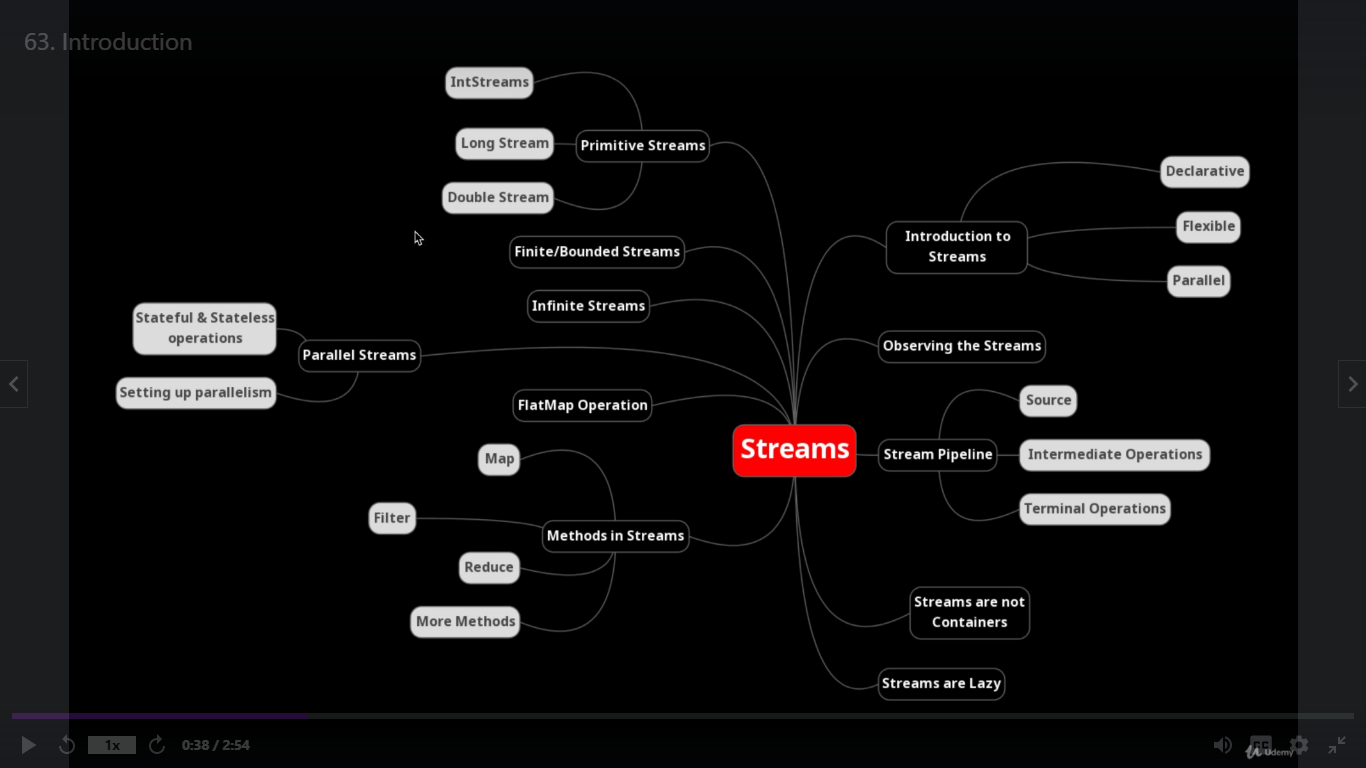
Parallel Streams

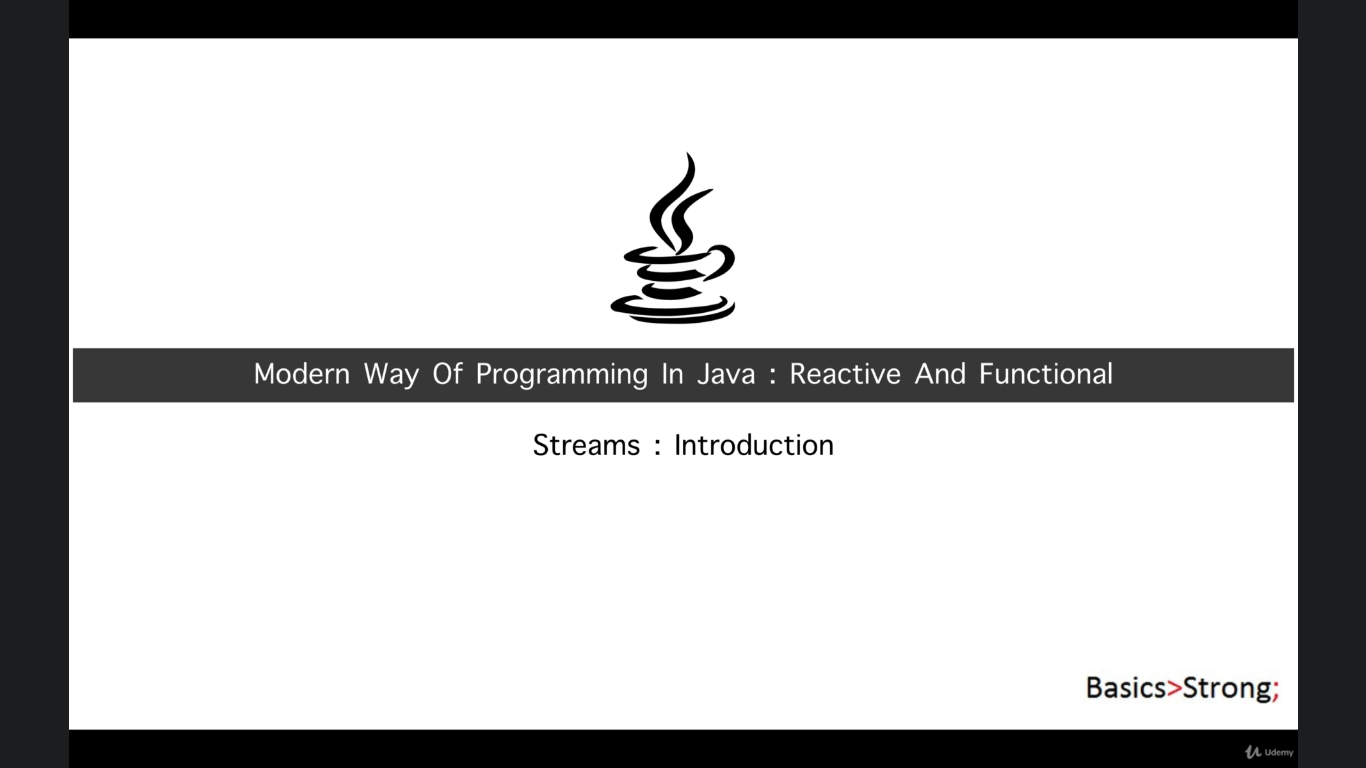
Stateless and stateful operations

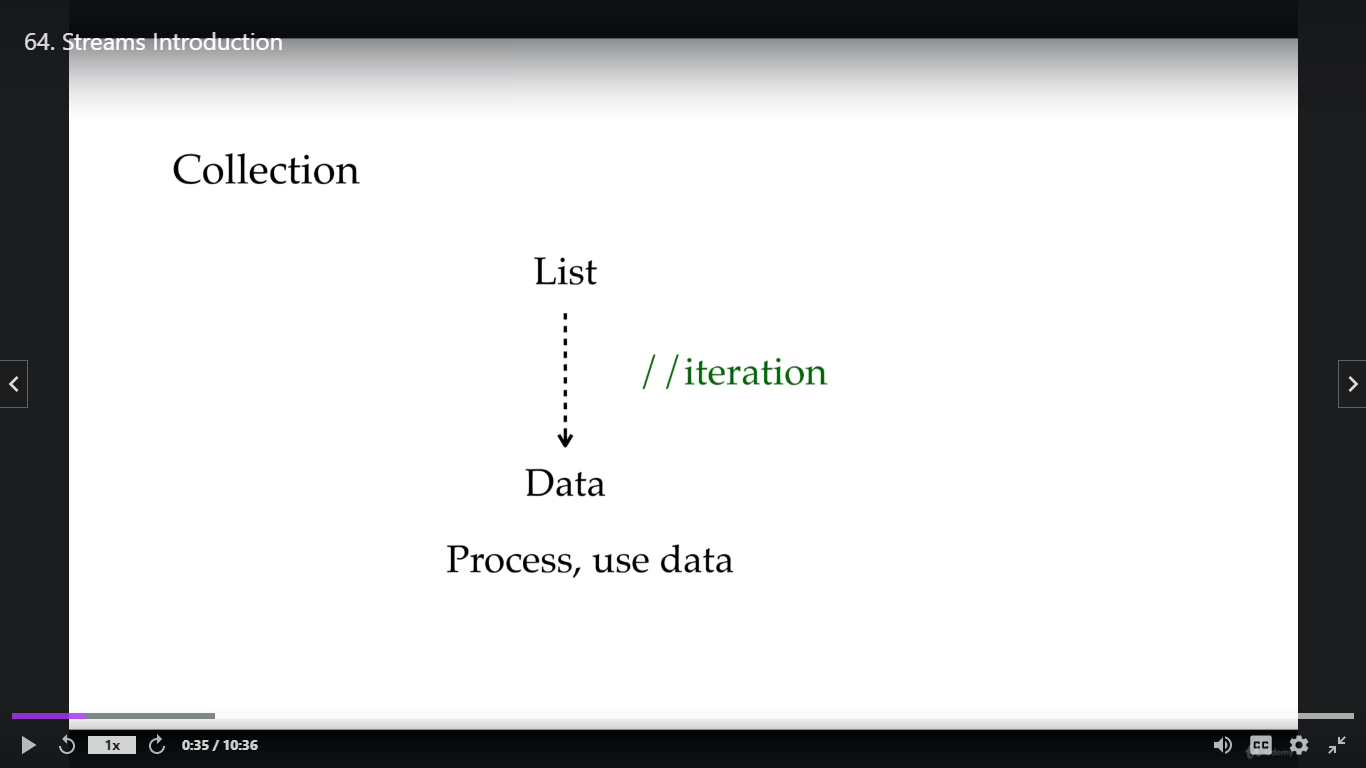
Setting Parallelism

Summary and BrainMapping

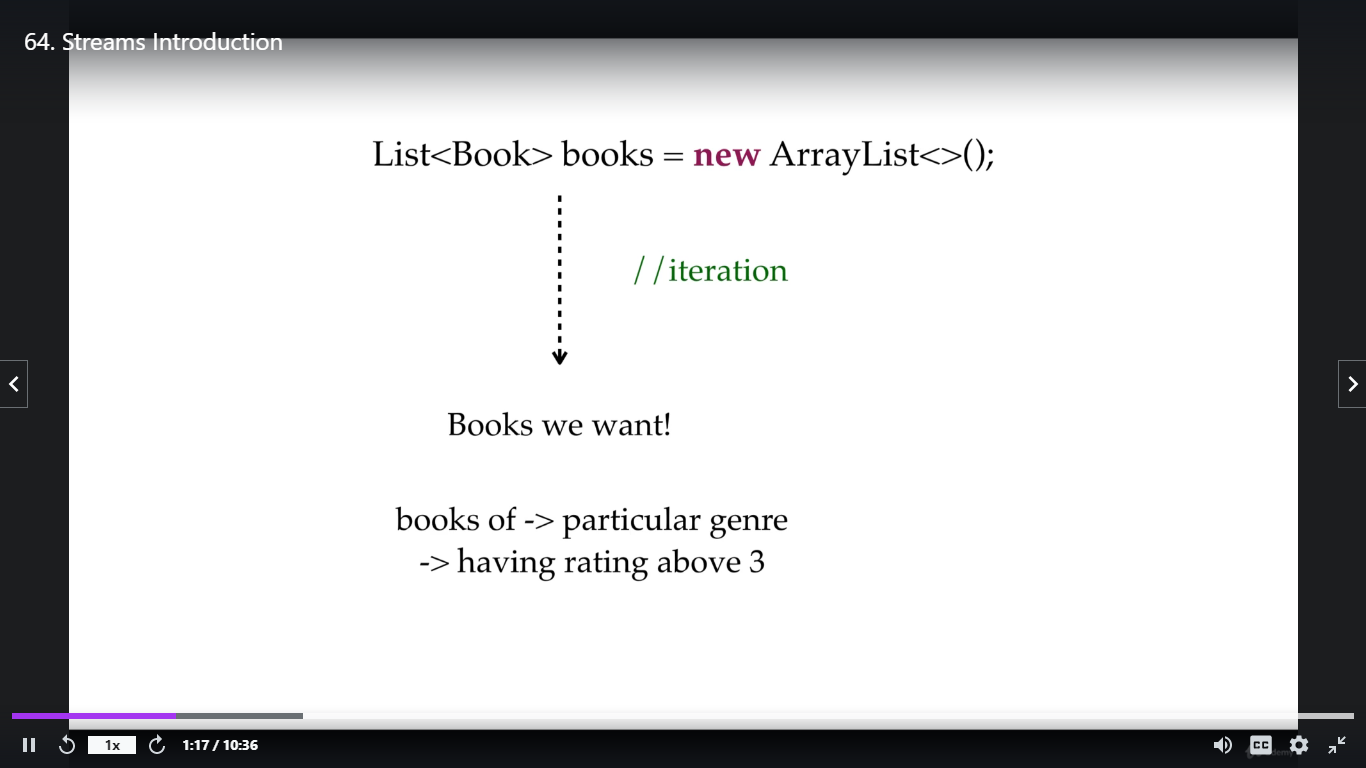




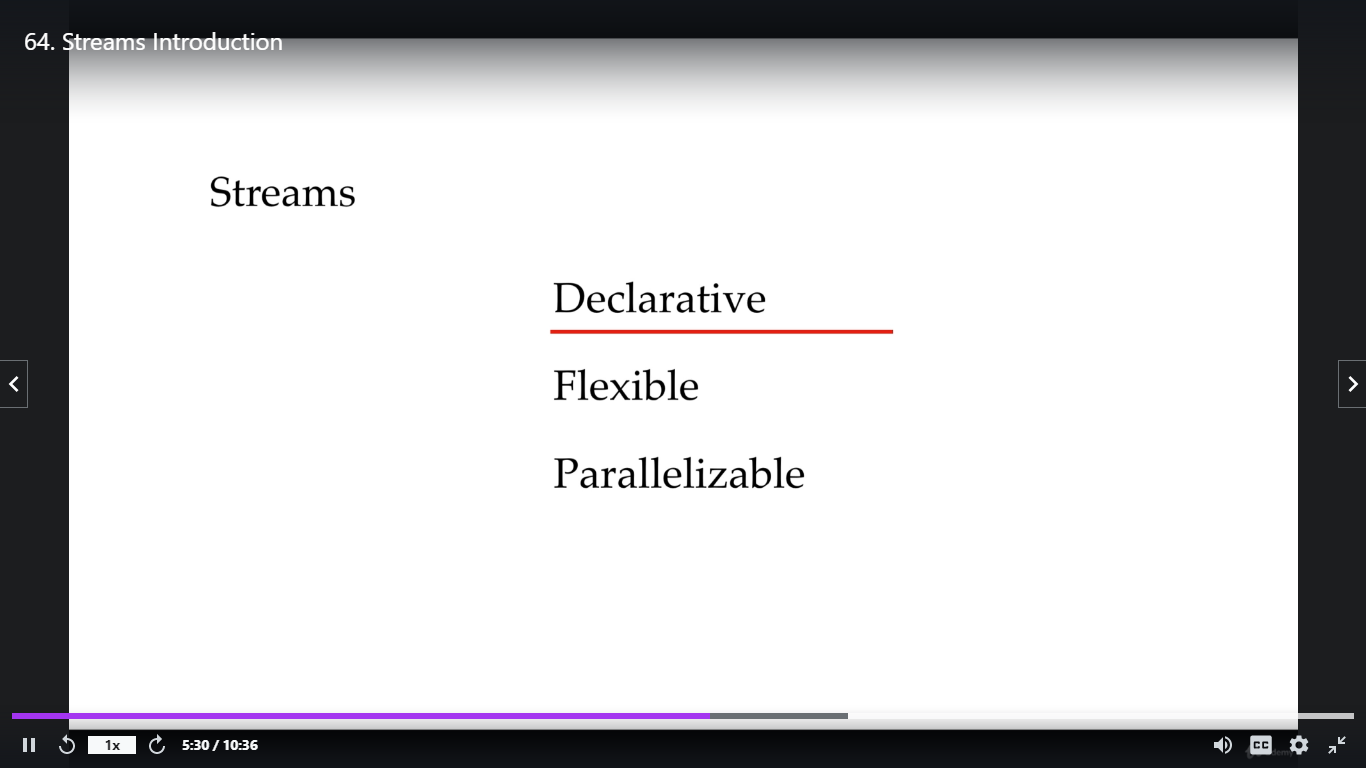


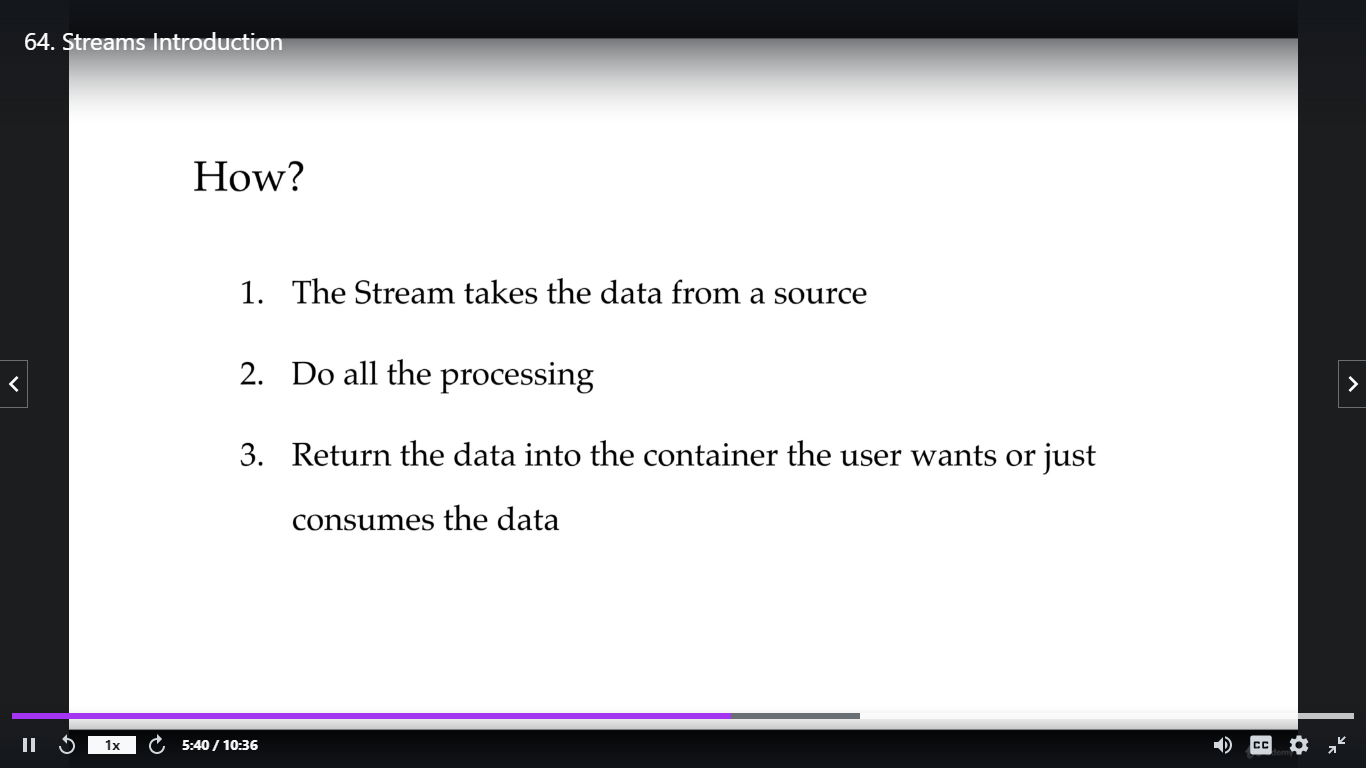


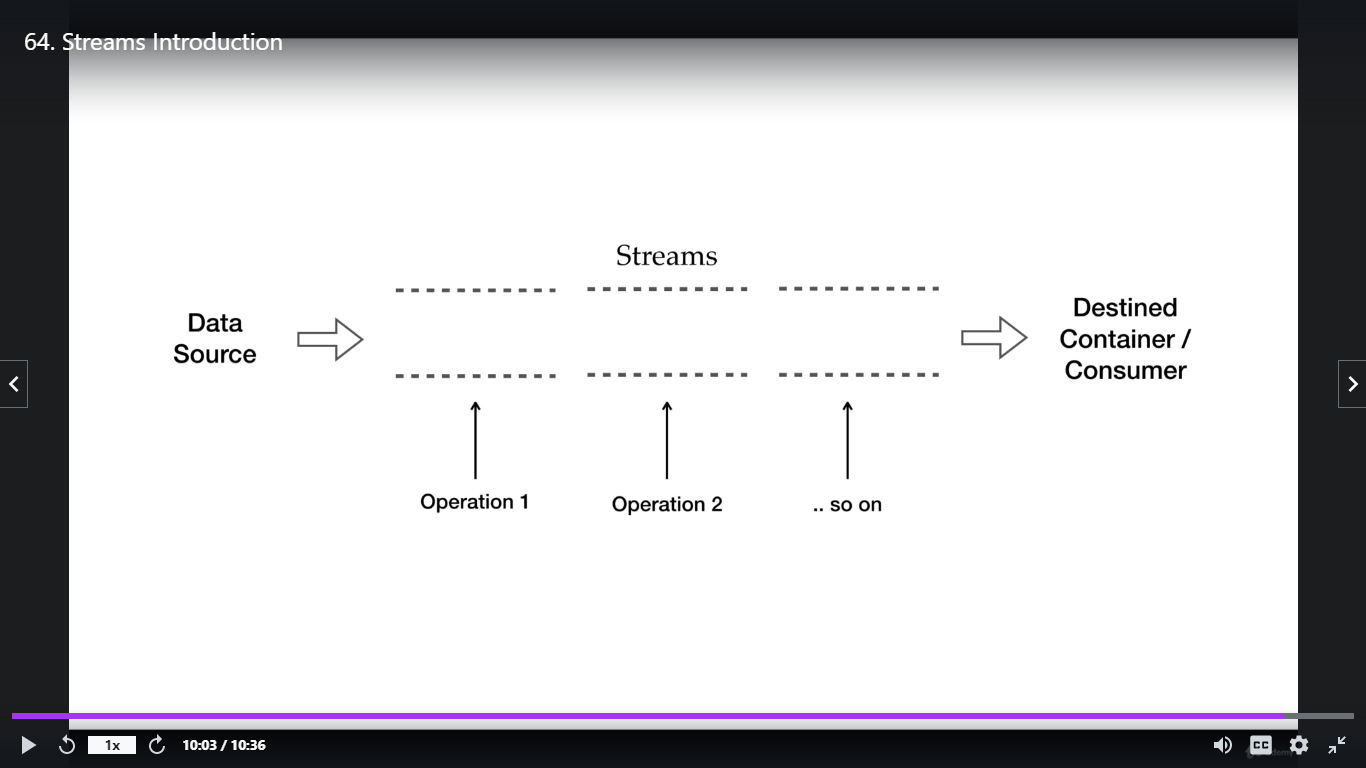


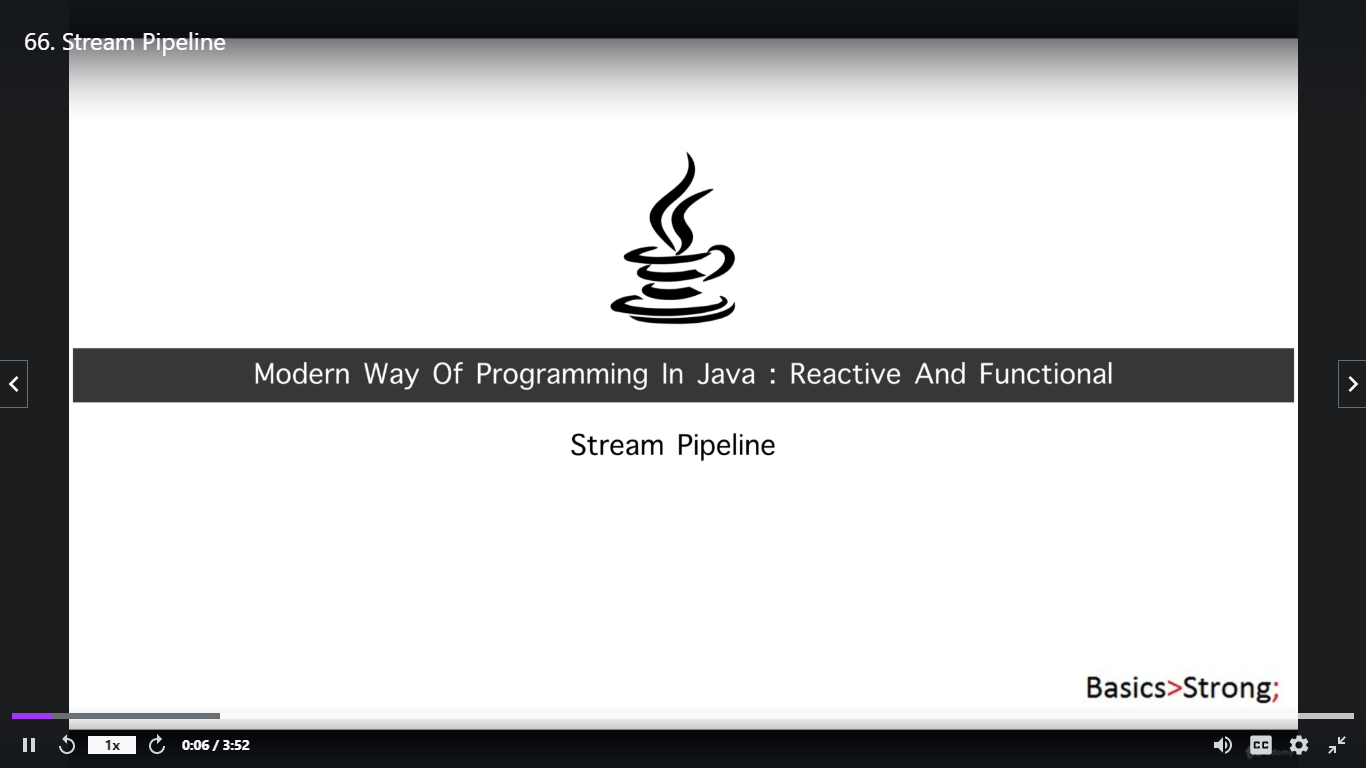




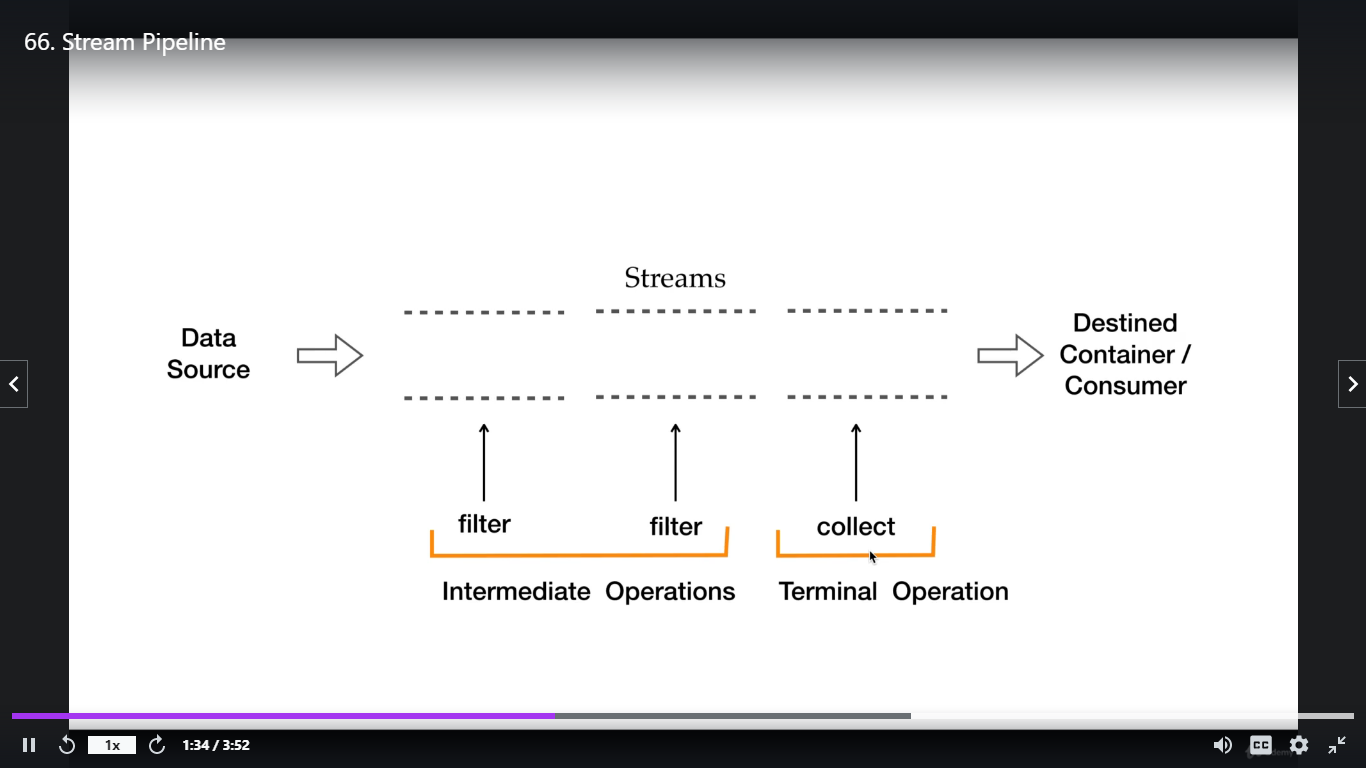




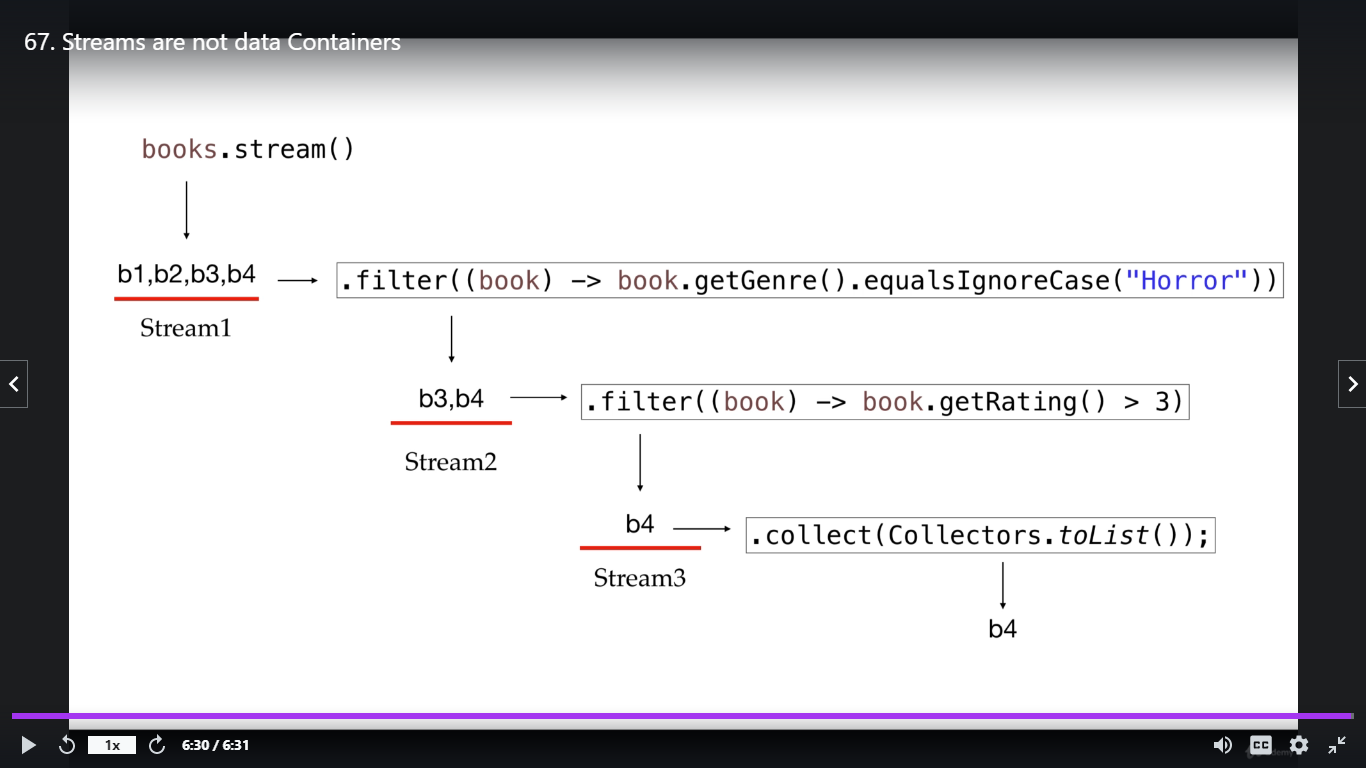


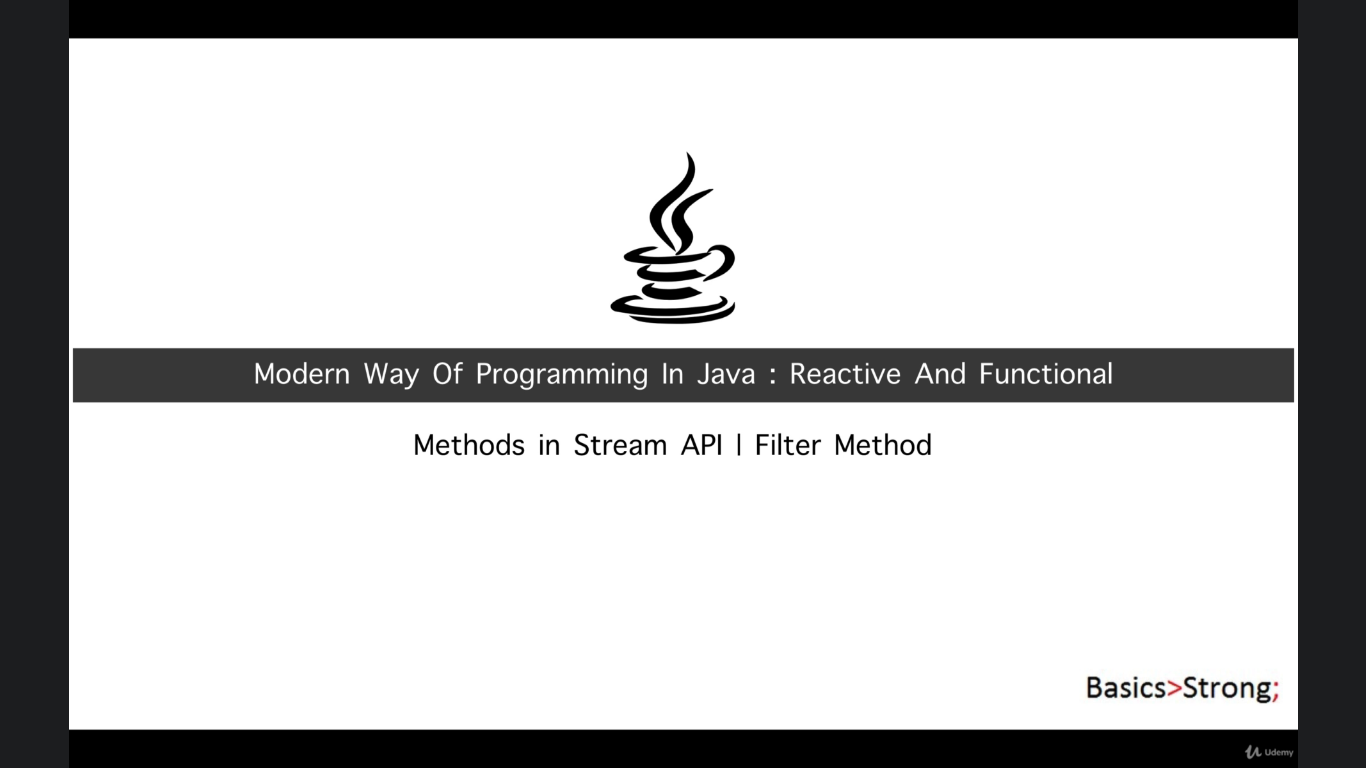


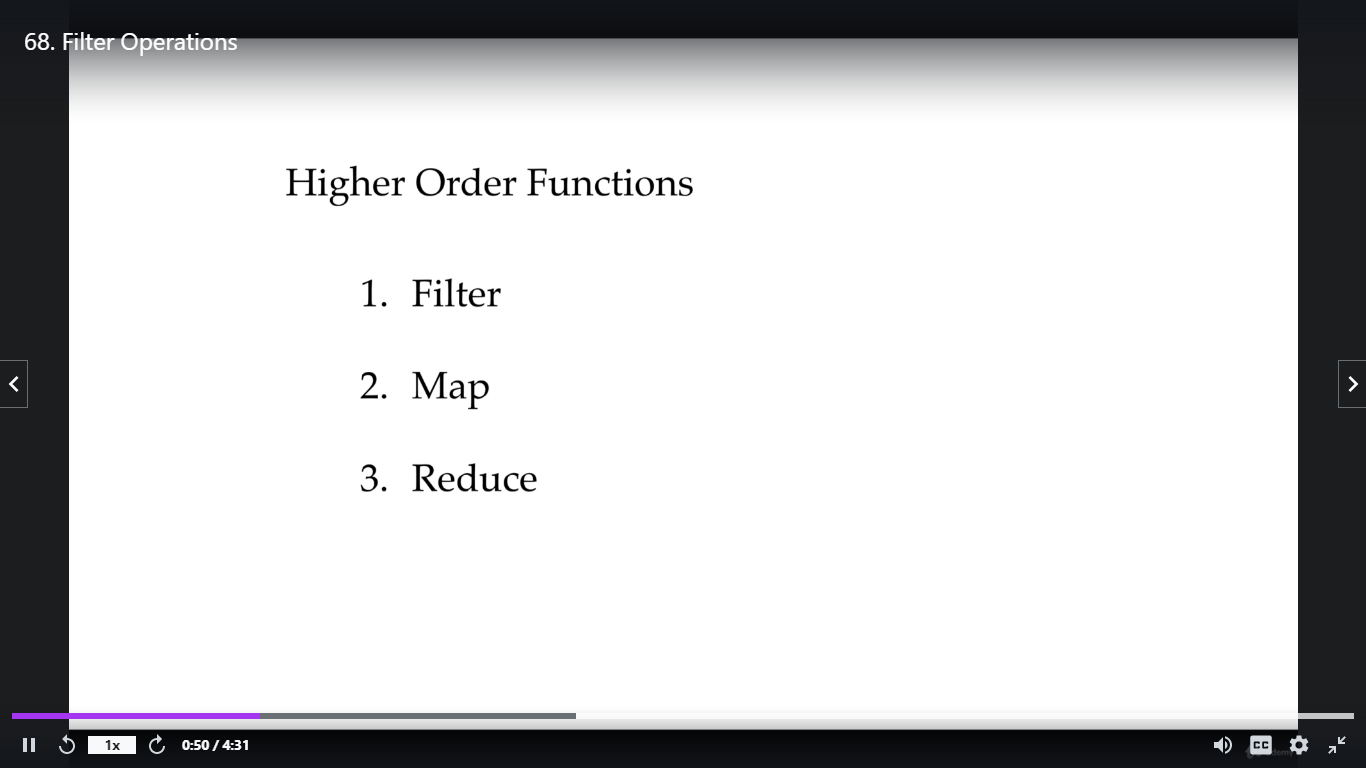


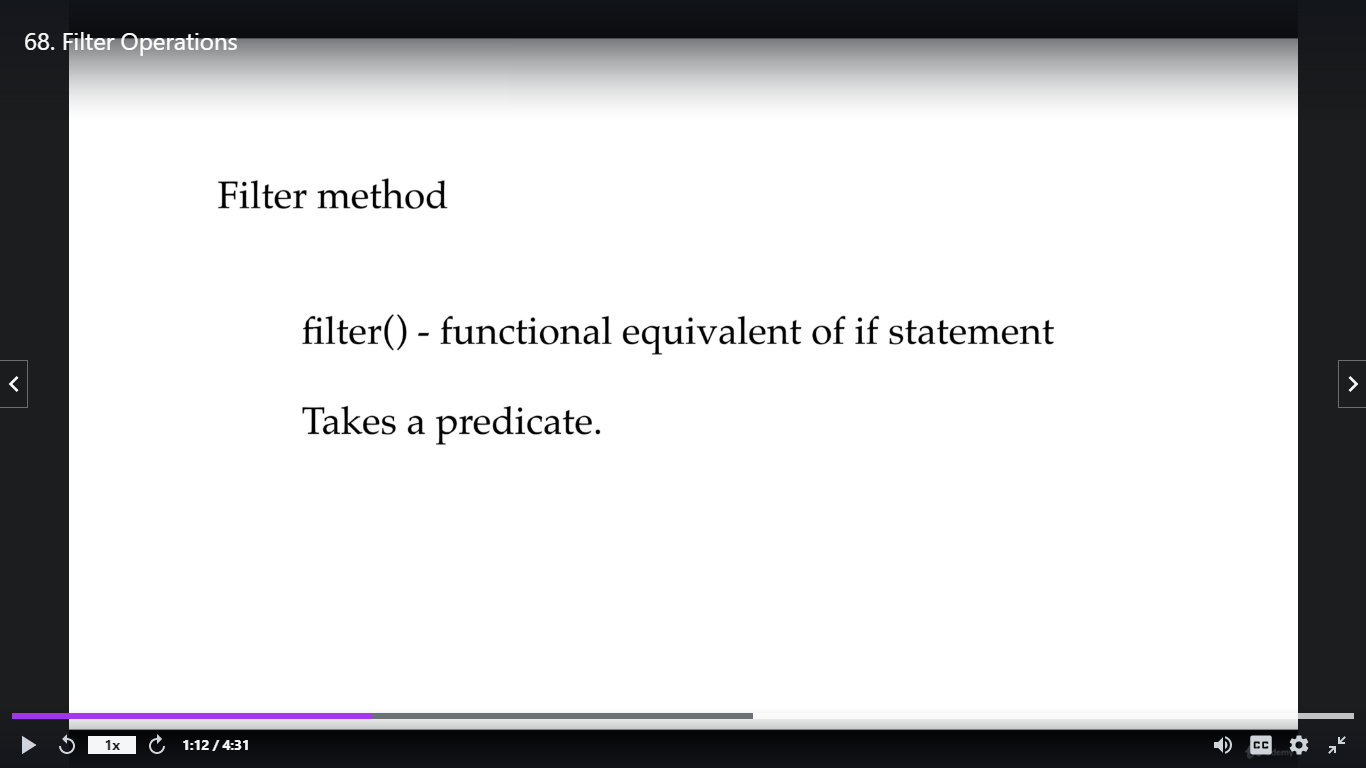


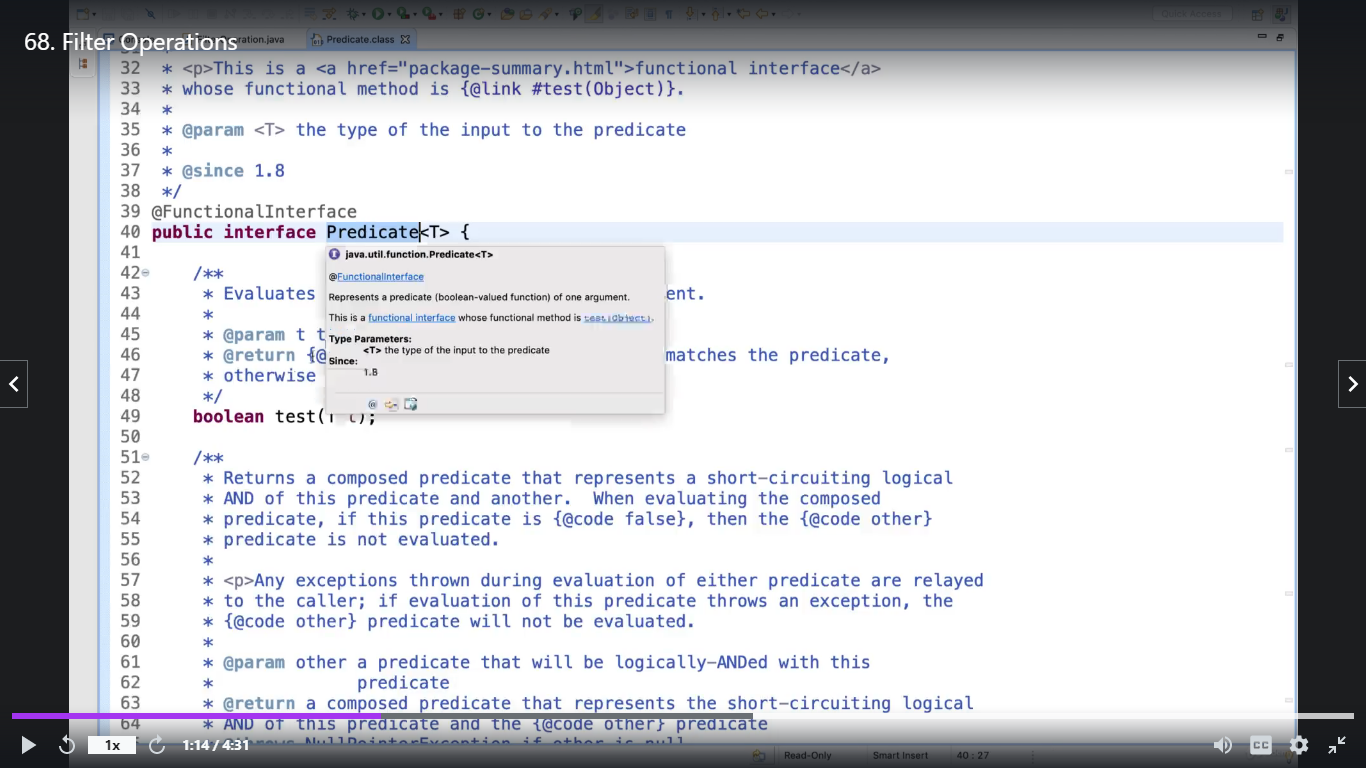


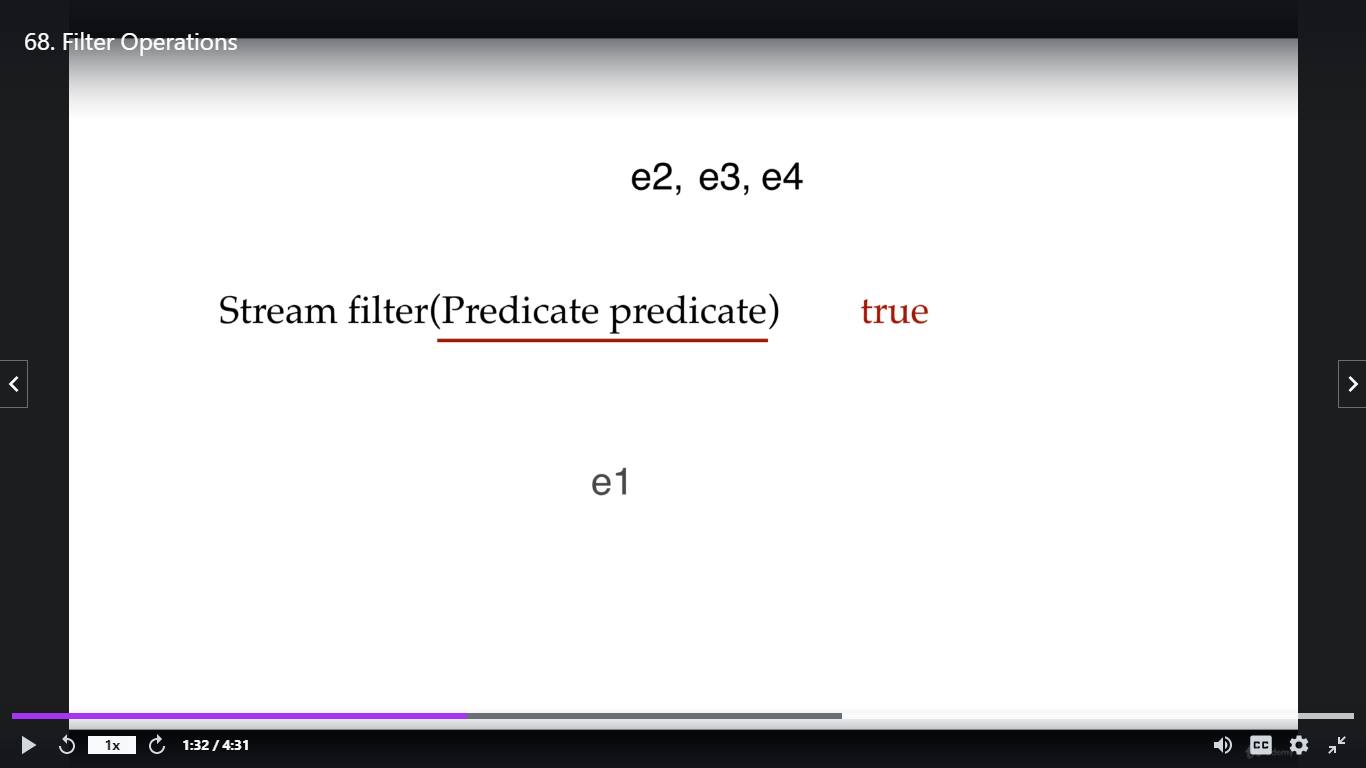


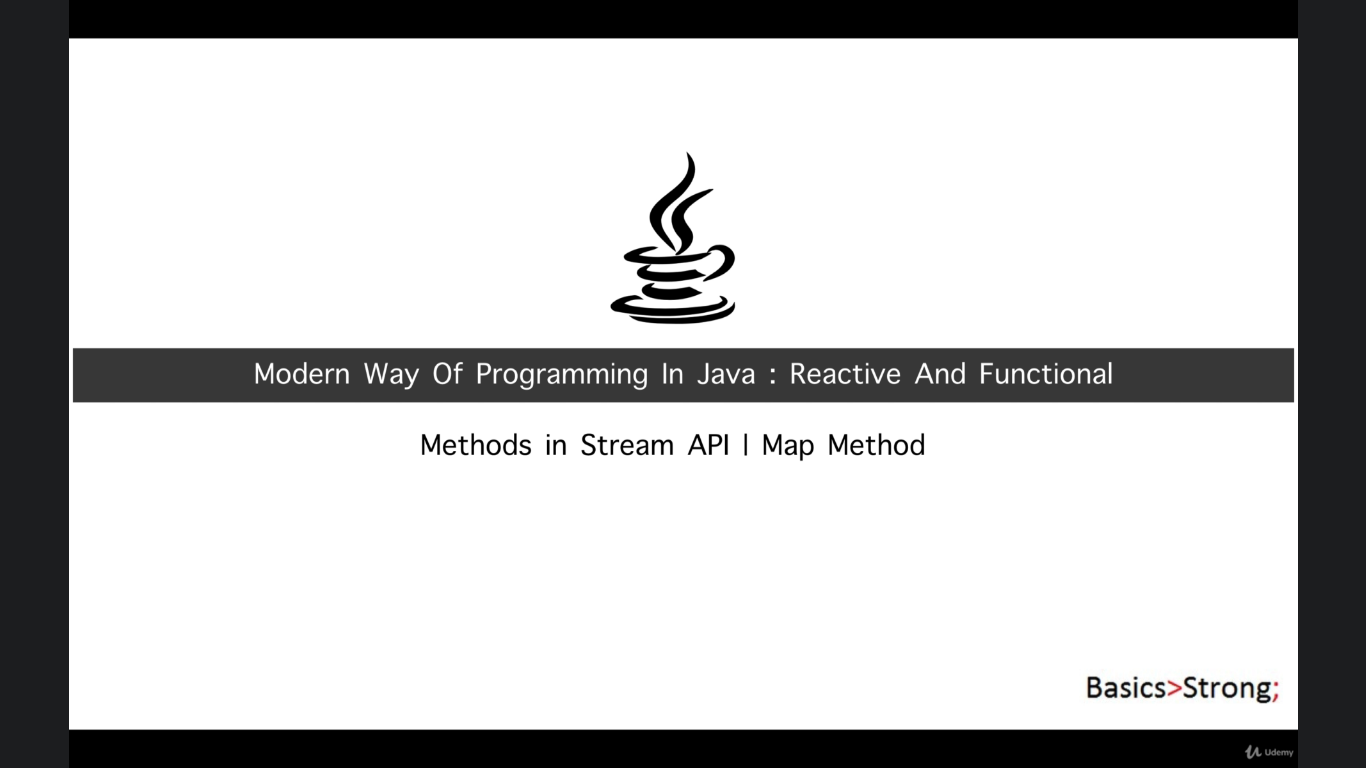


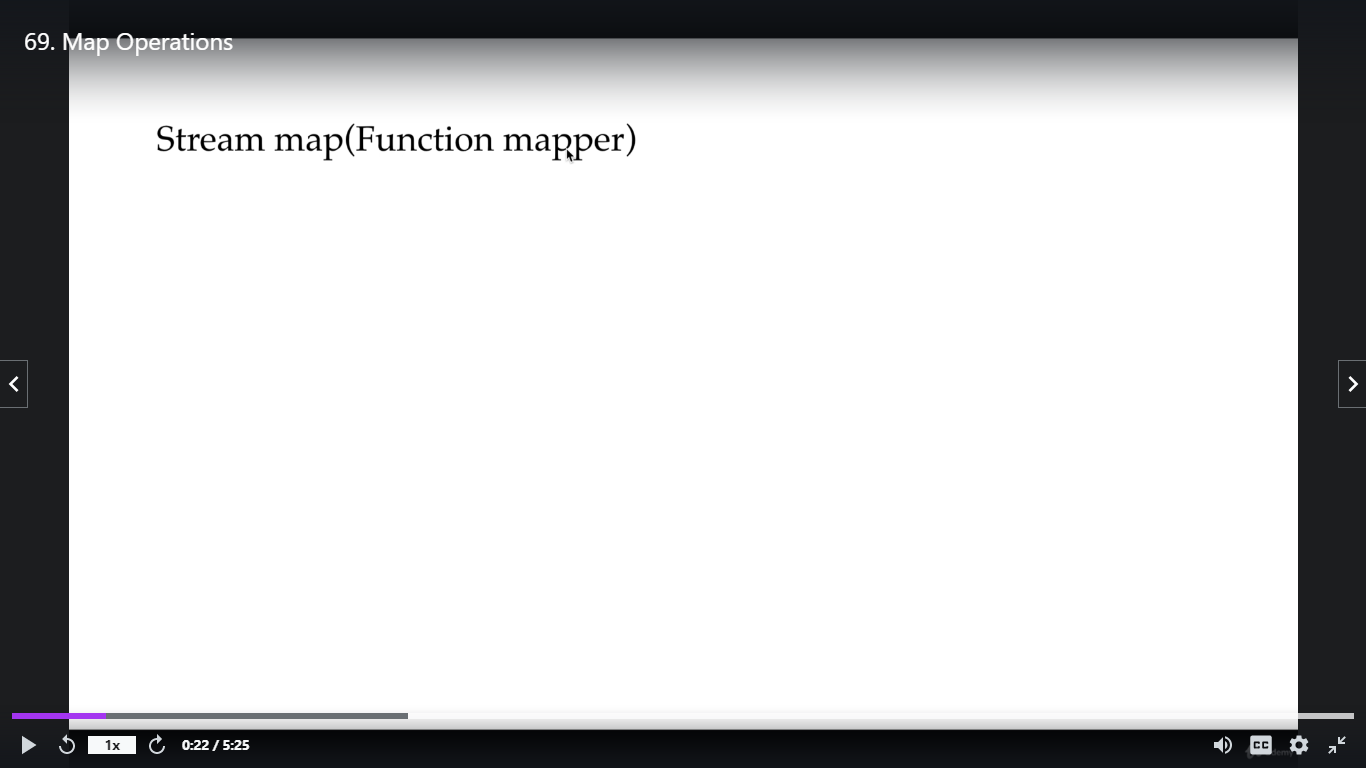


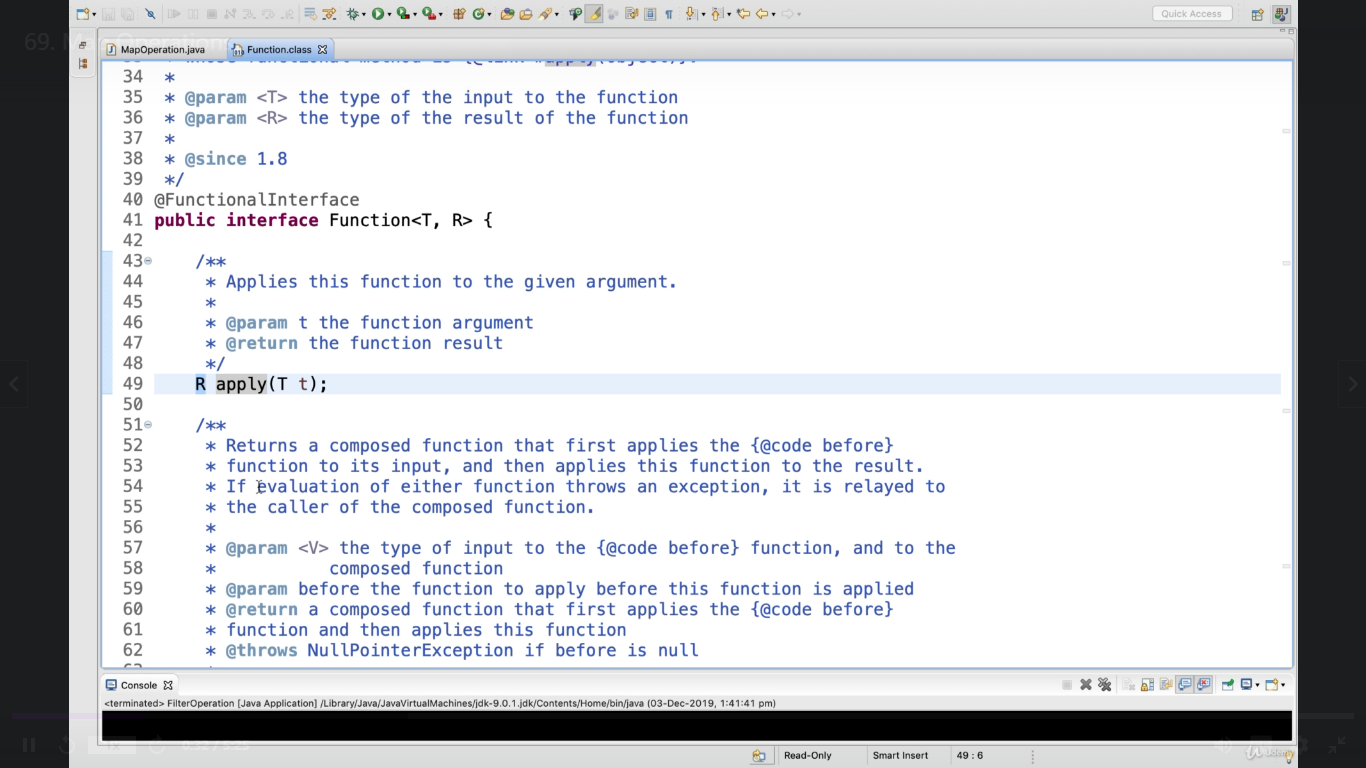


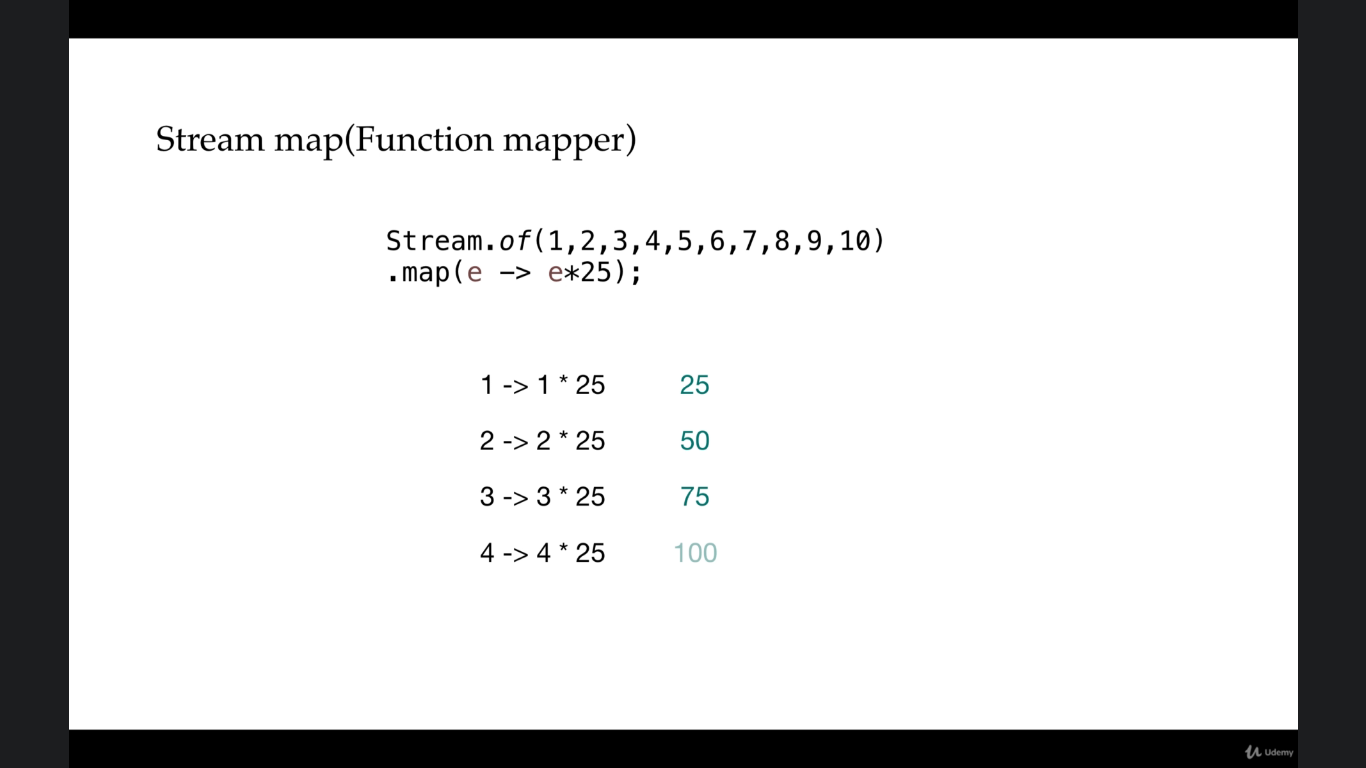




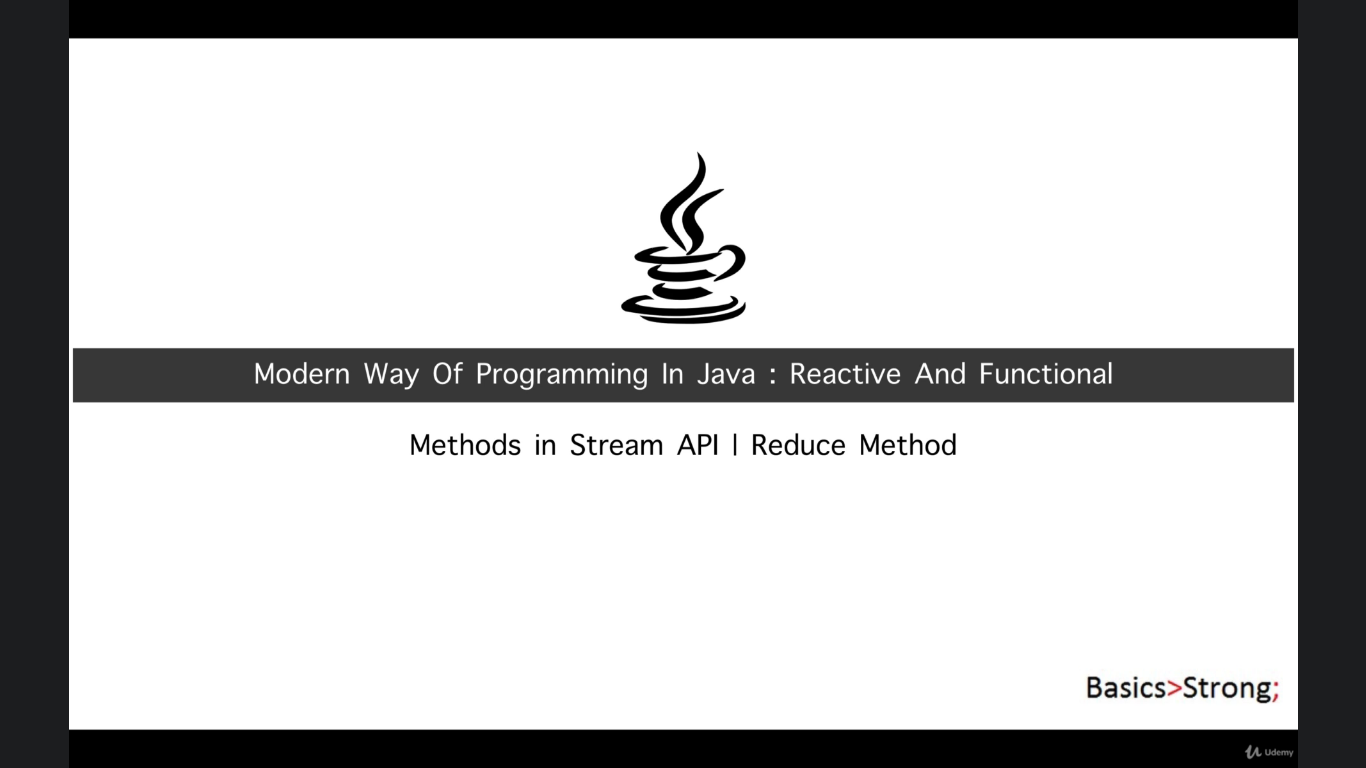




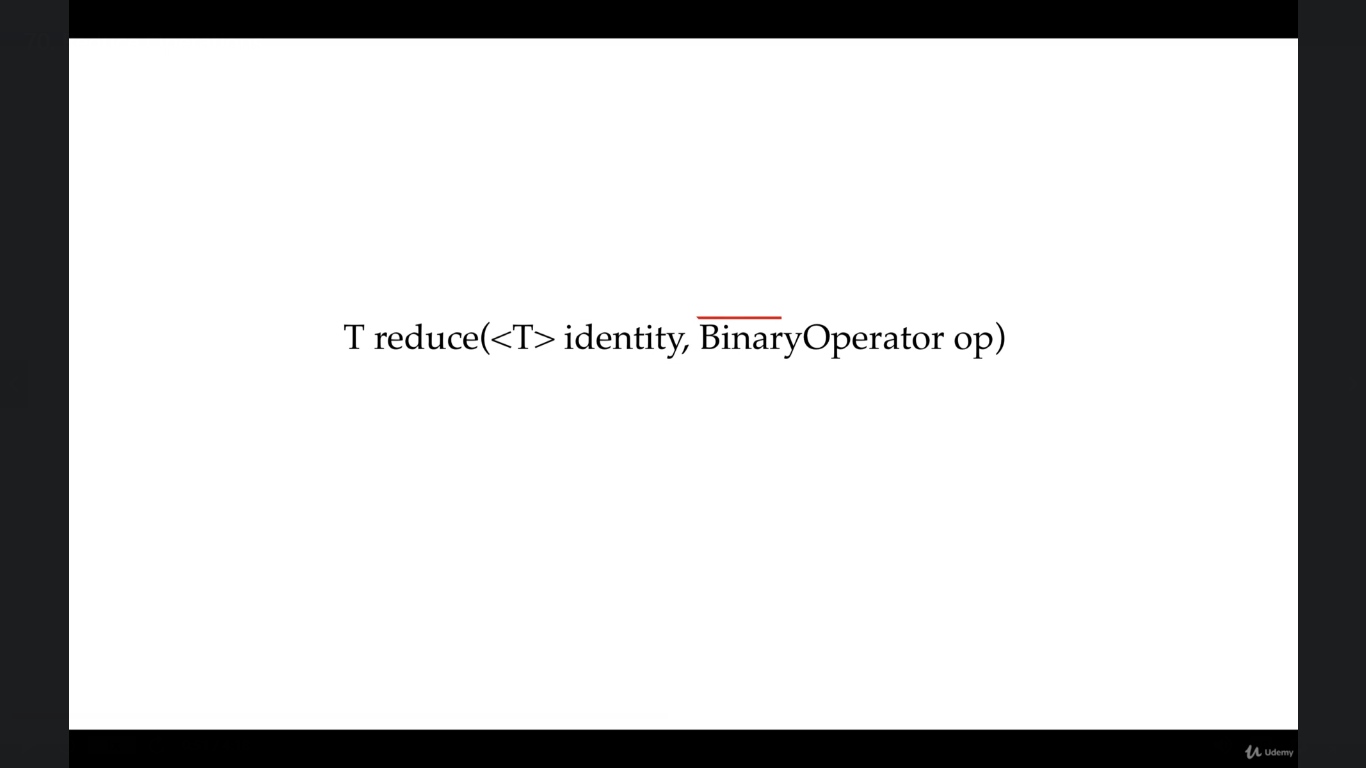


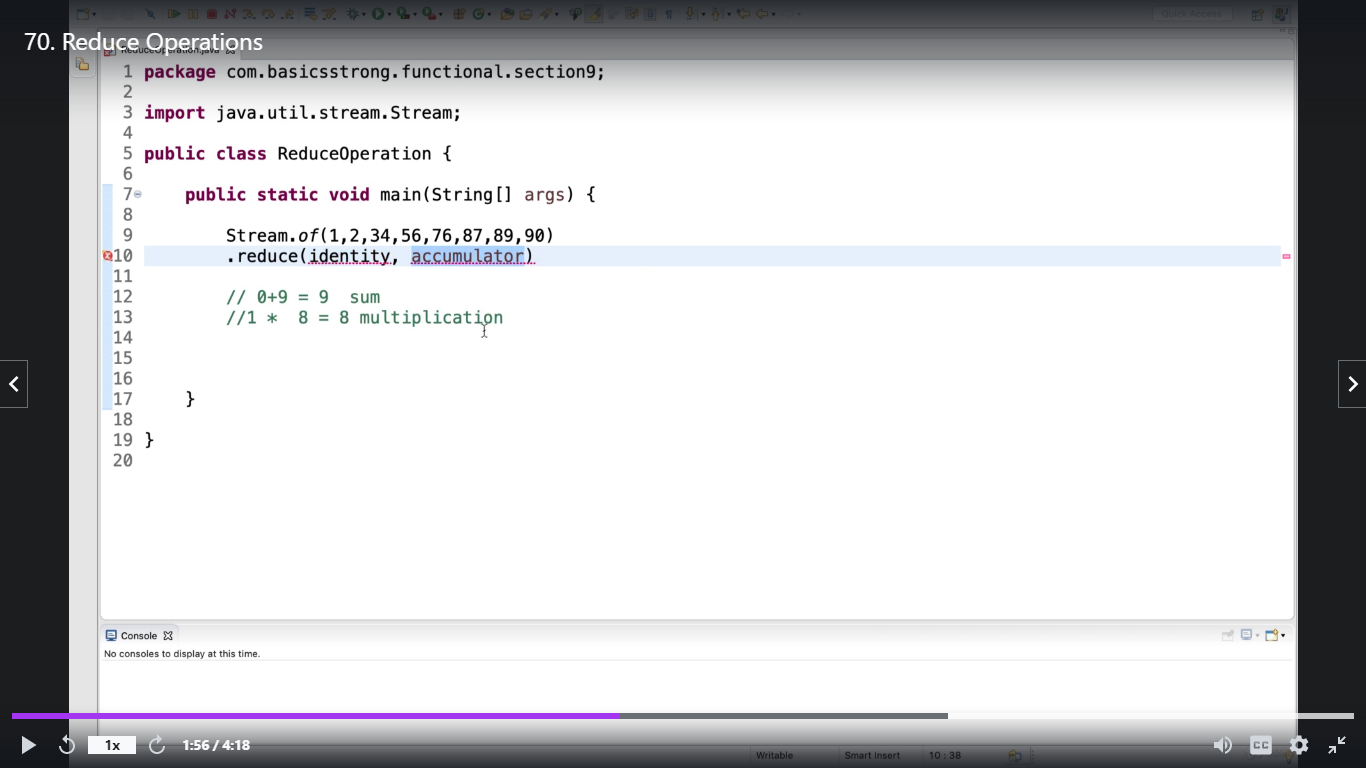


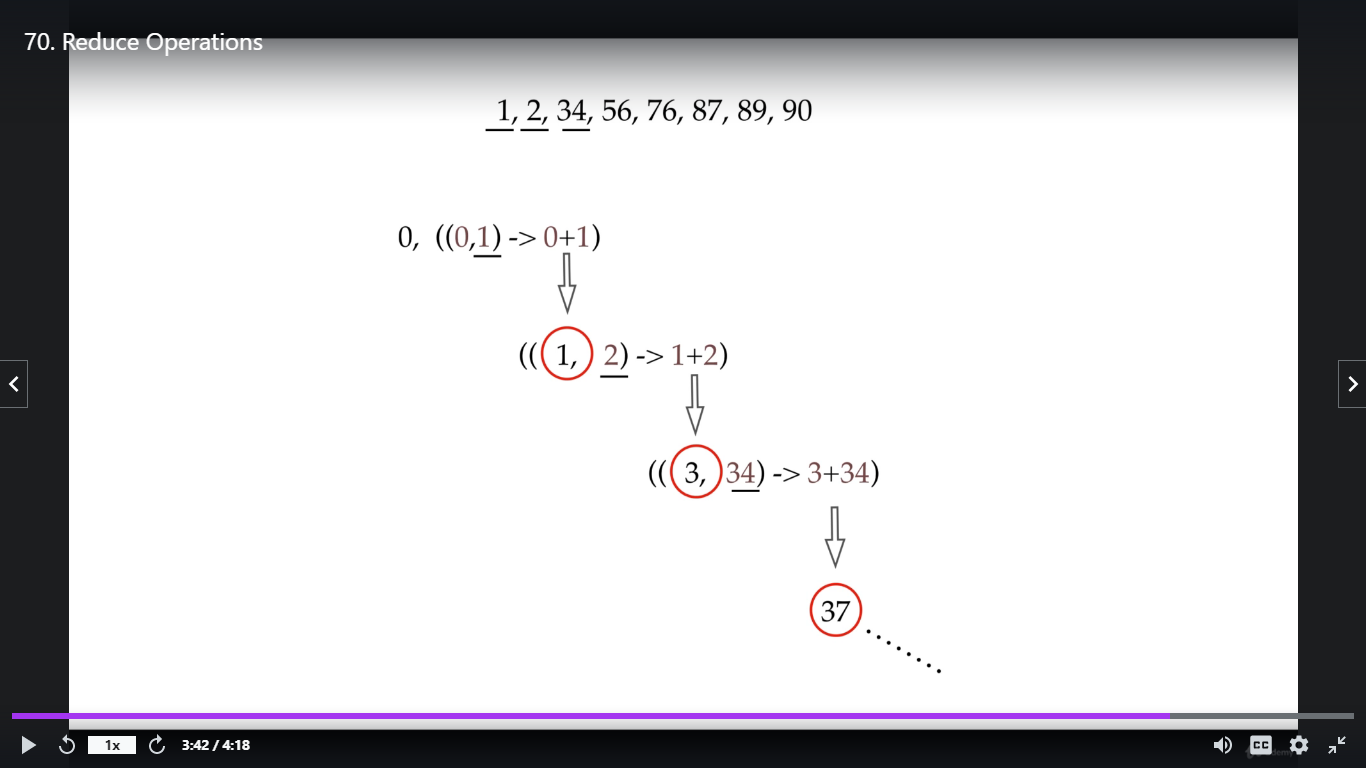
Avoid to change the state during function programing may get concurrent modification exception

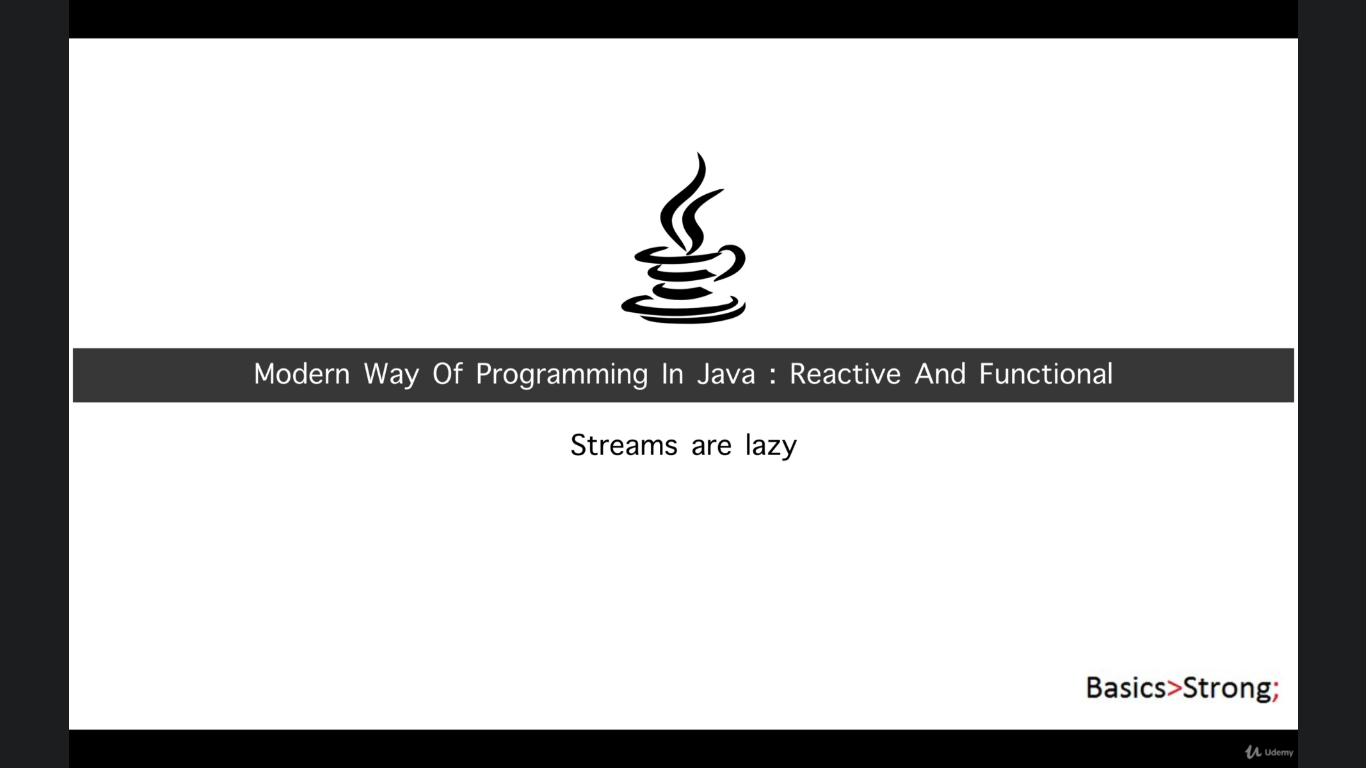


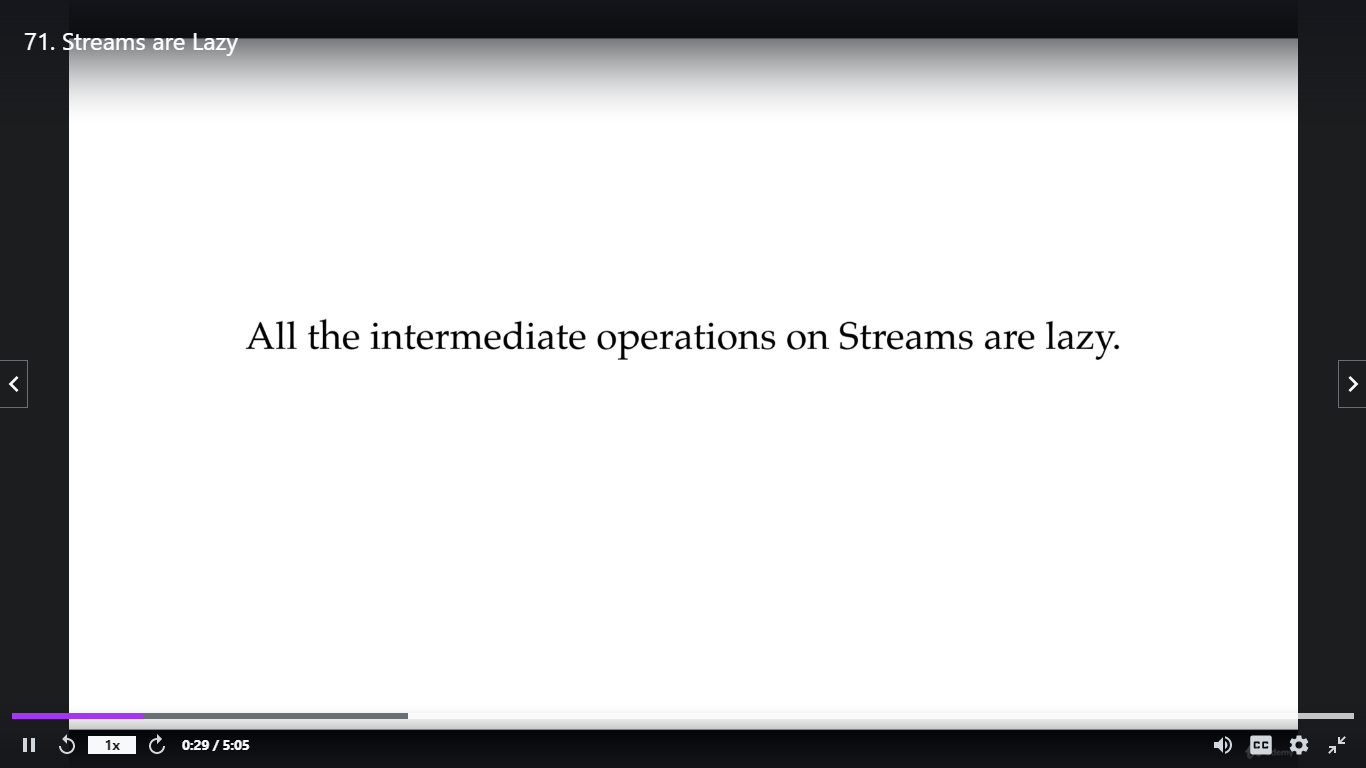






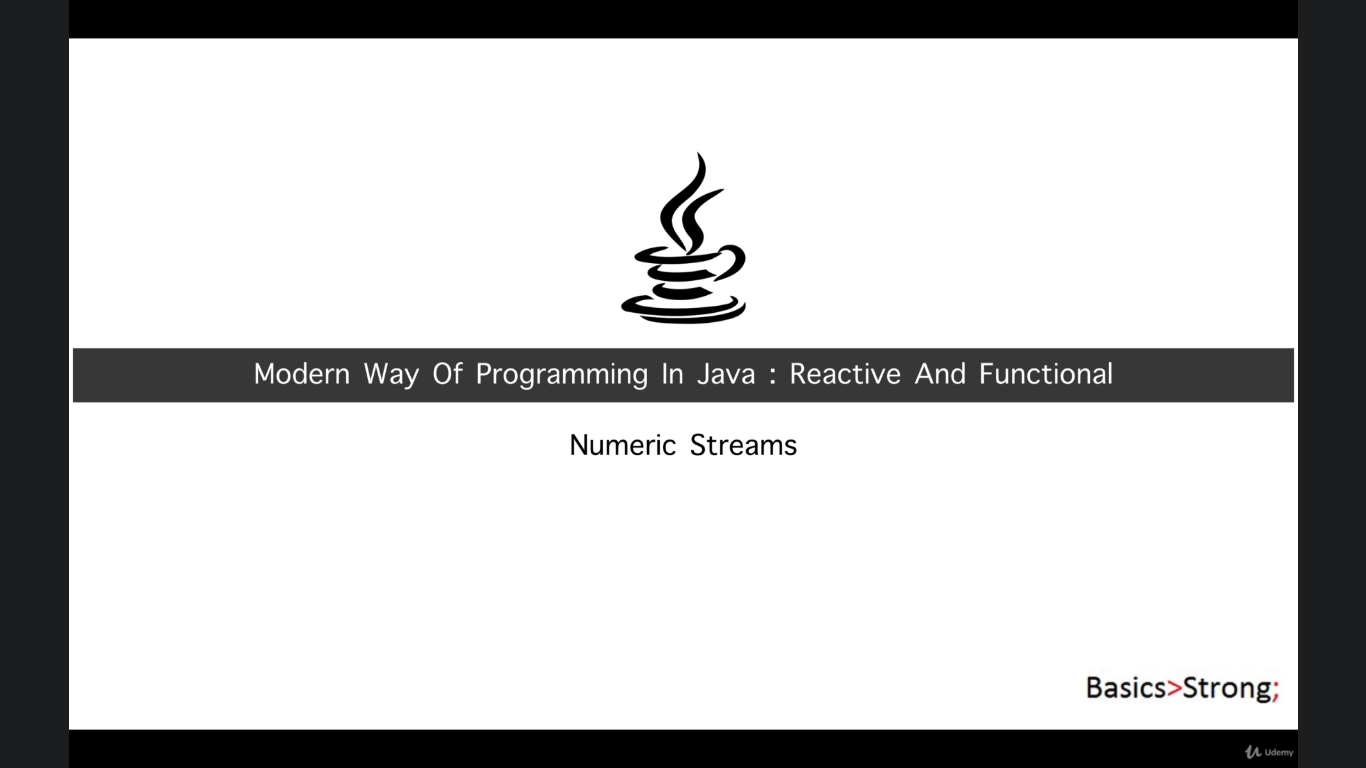




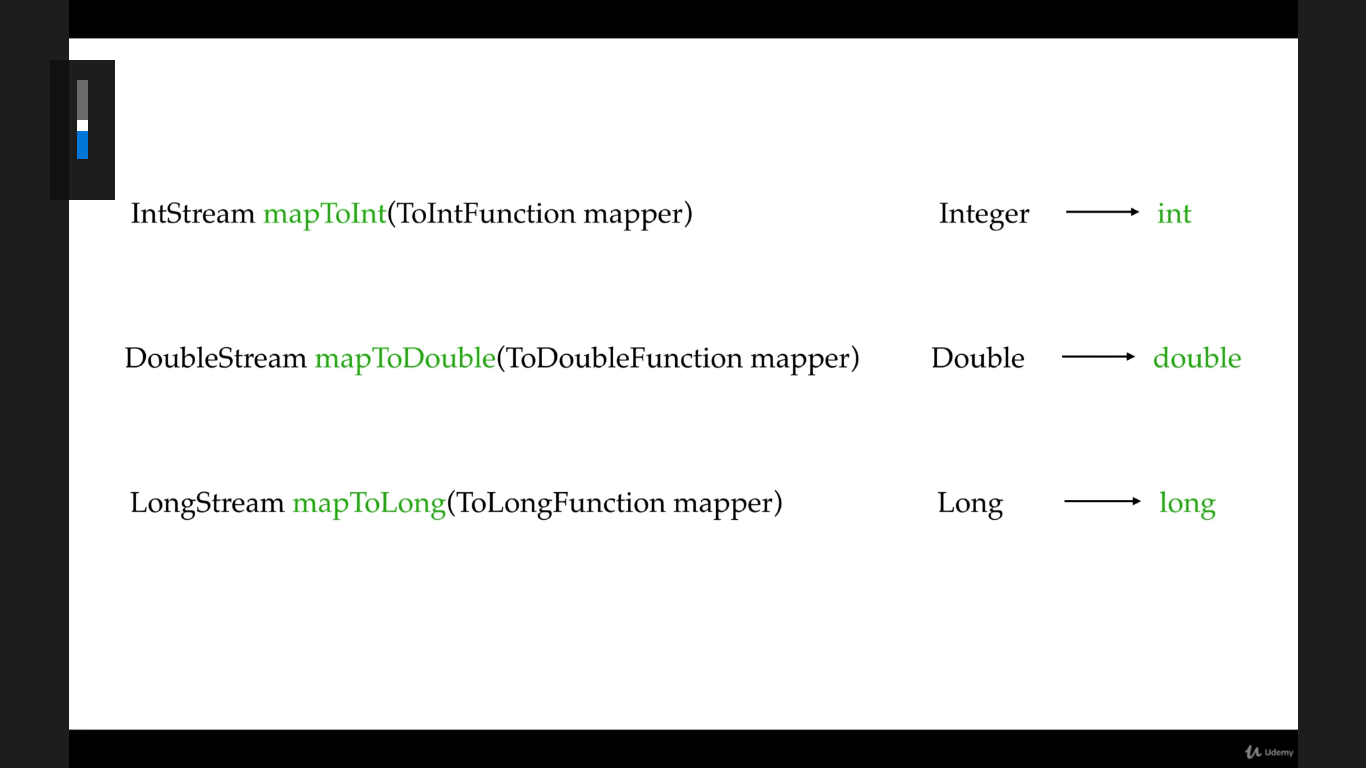


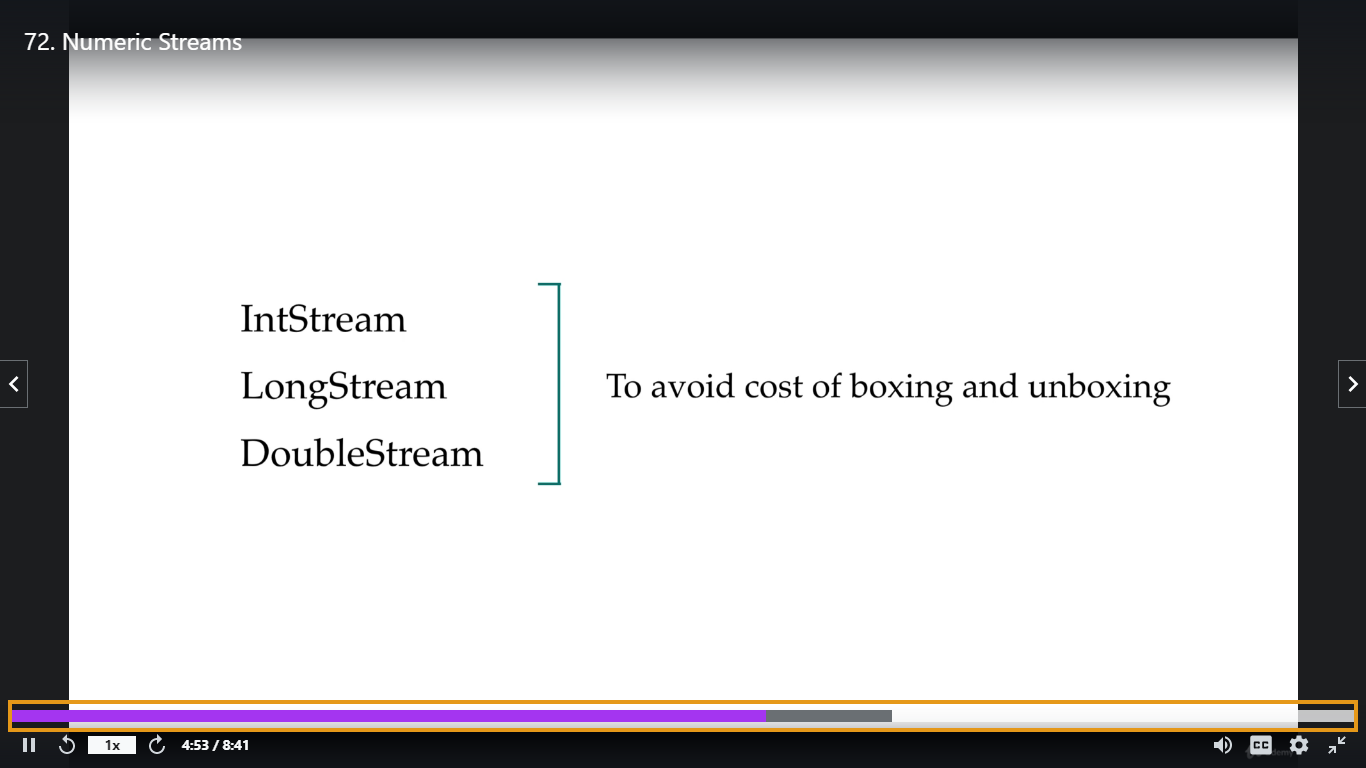
Reduce Operations

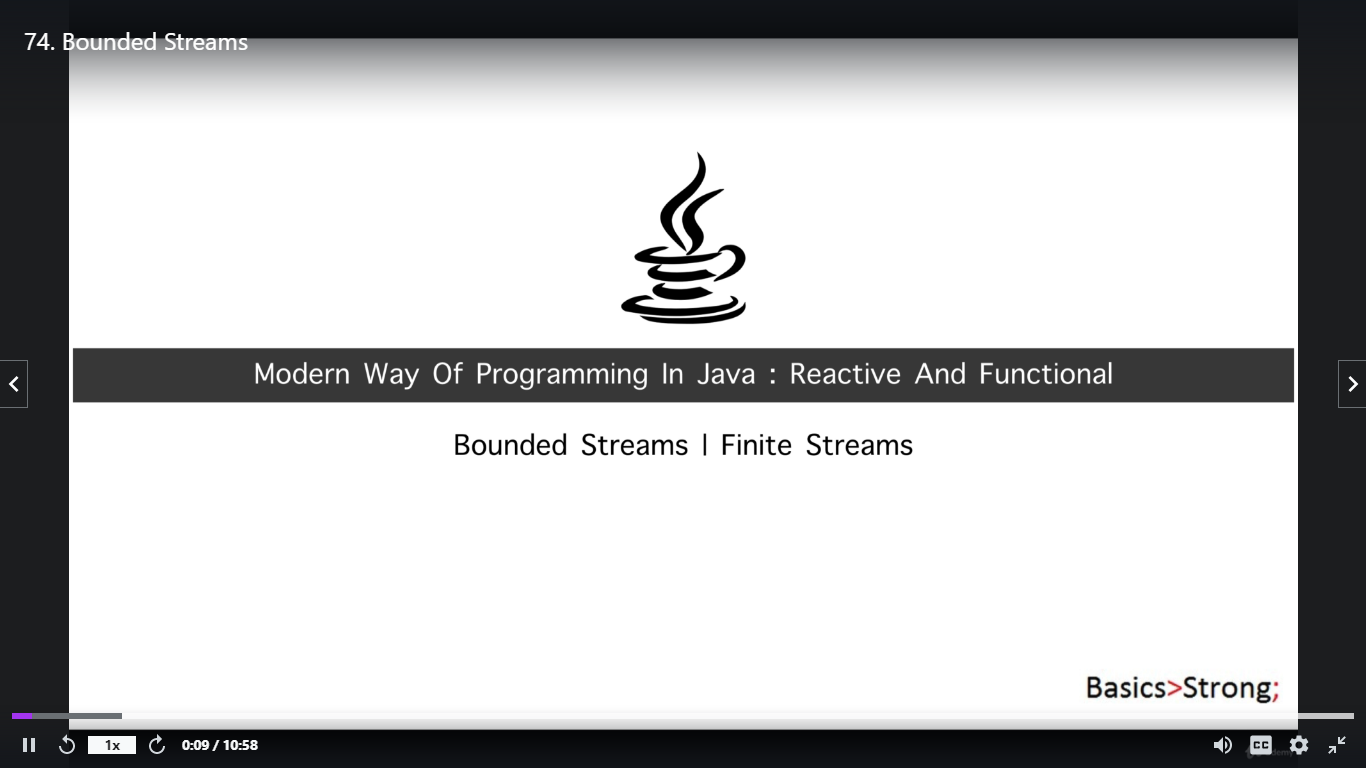
Stream get called only when it executed, the terminal operation is eager when it execute all the stream operation within that get executed.

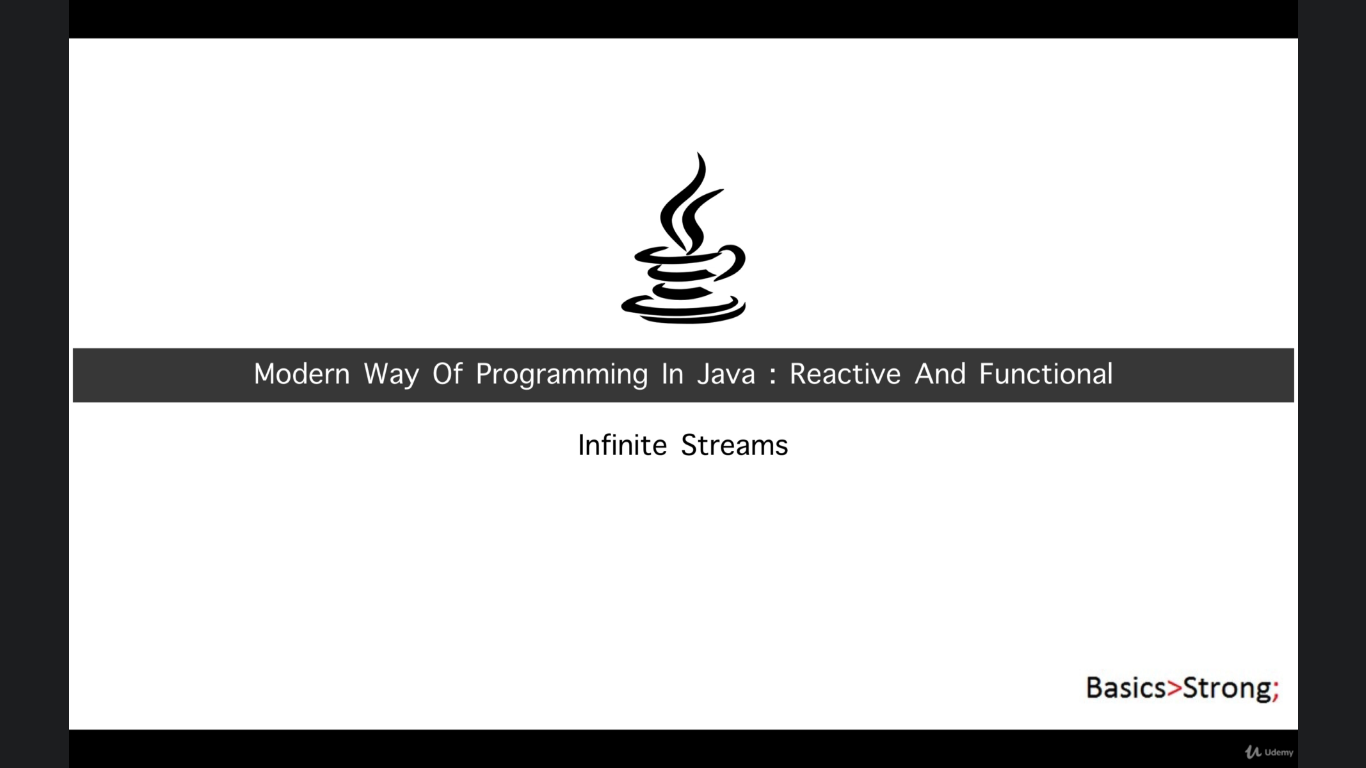


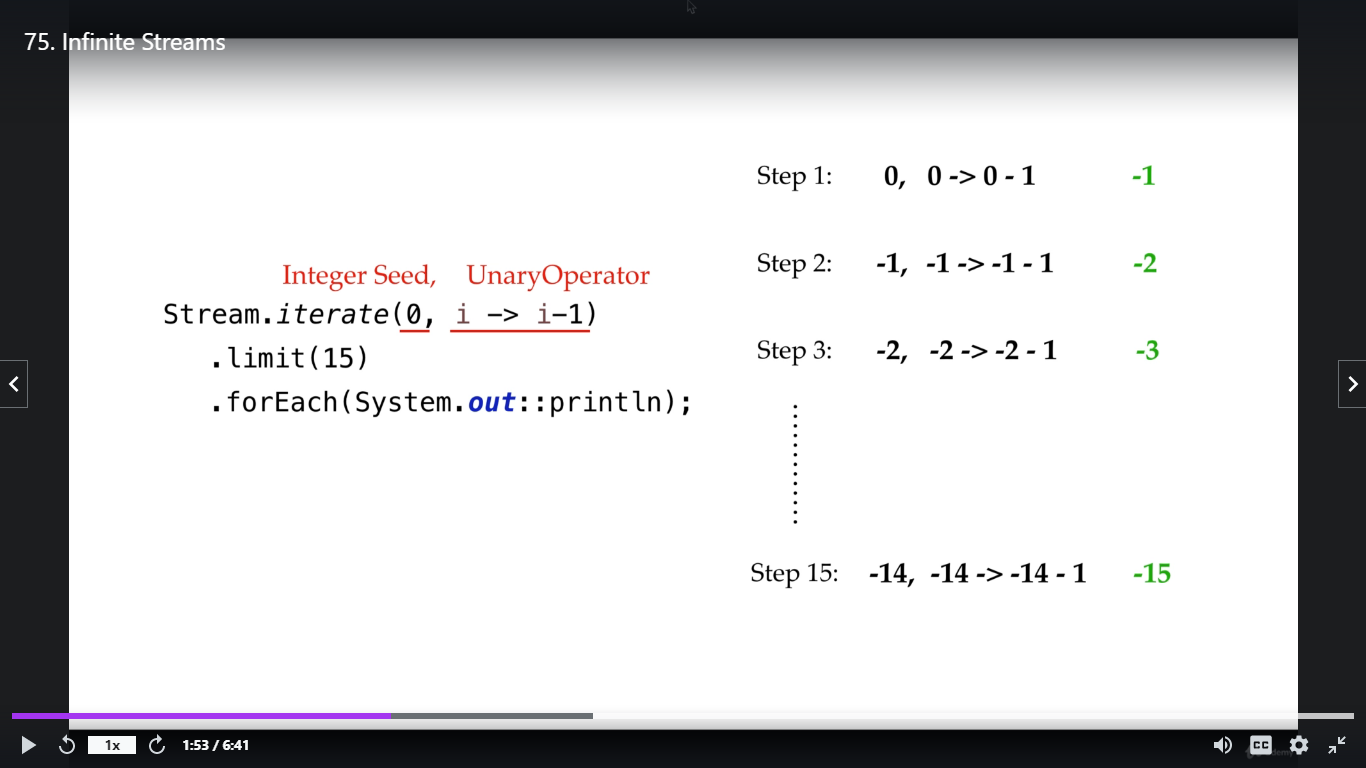


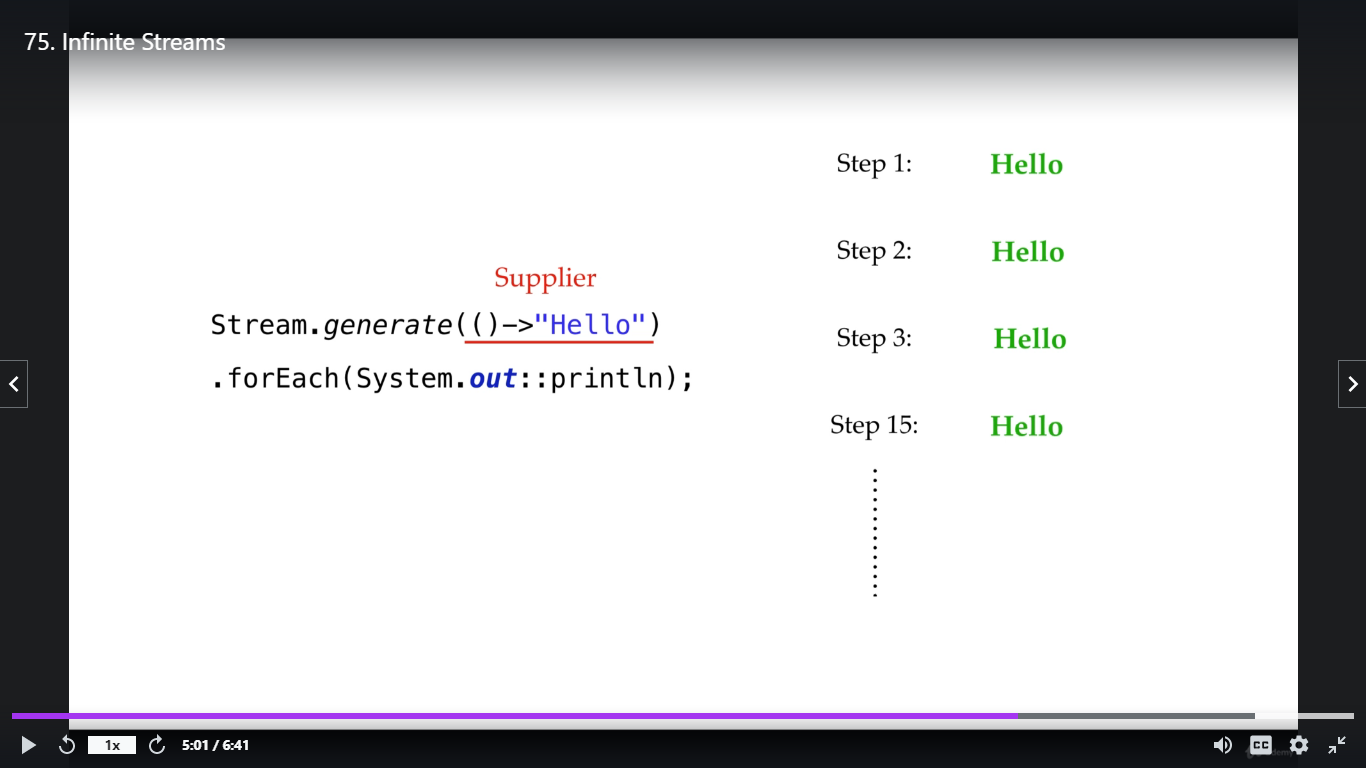


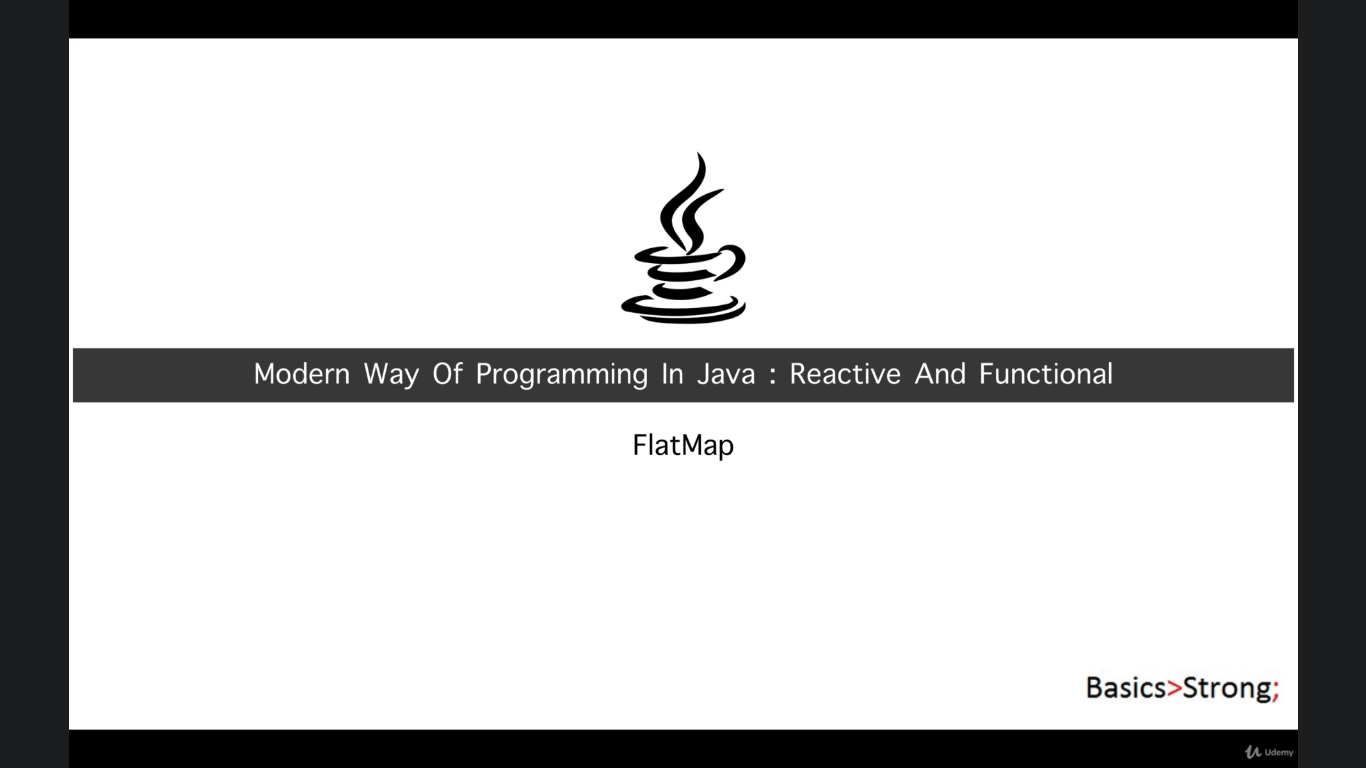


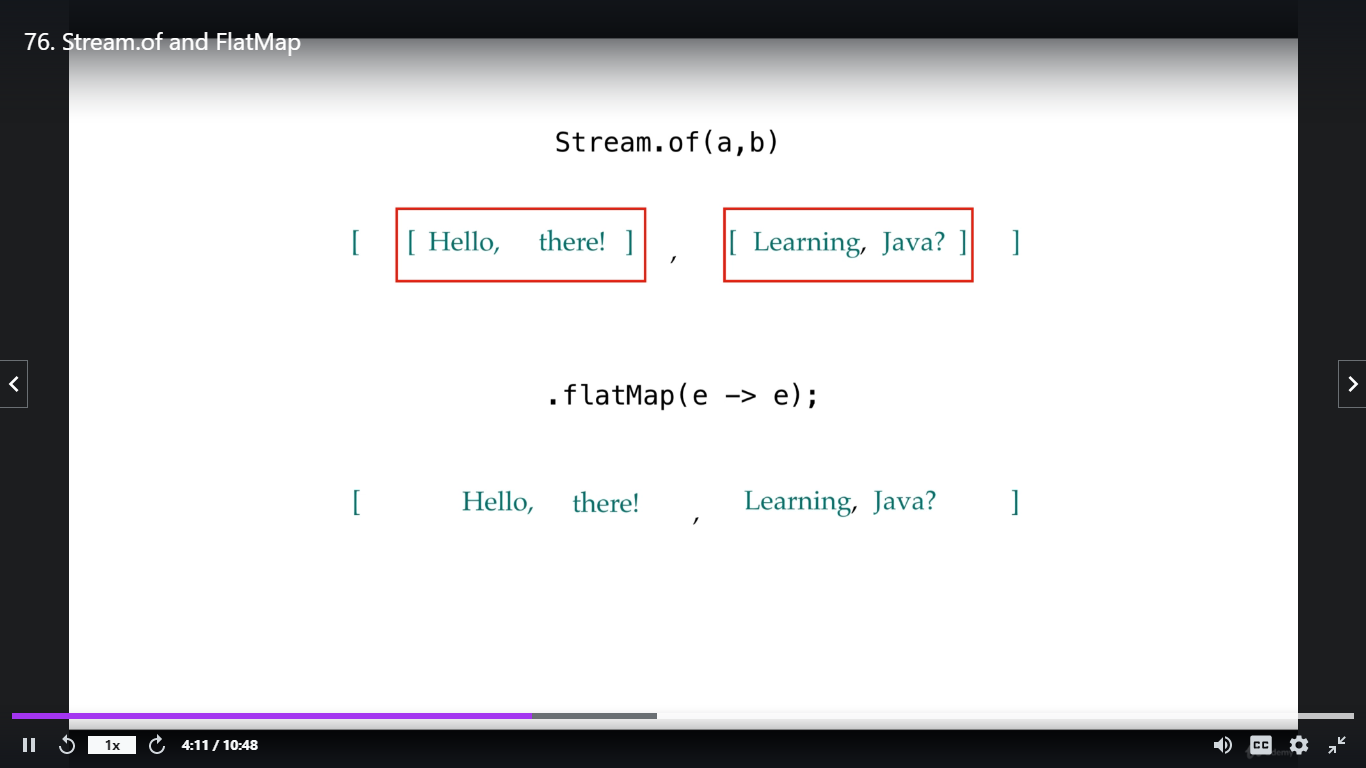


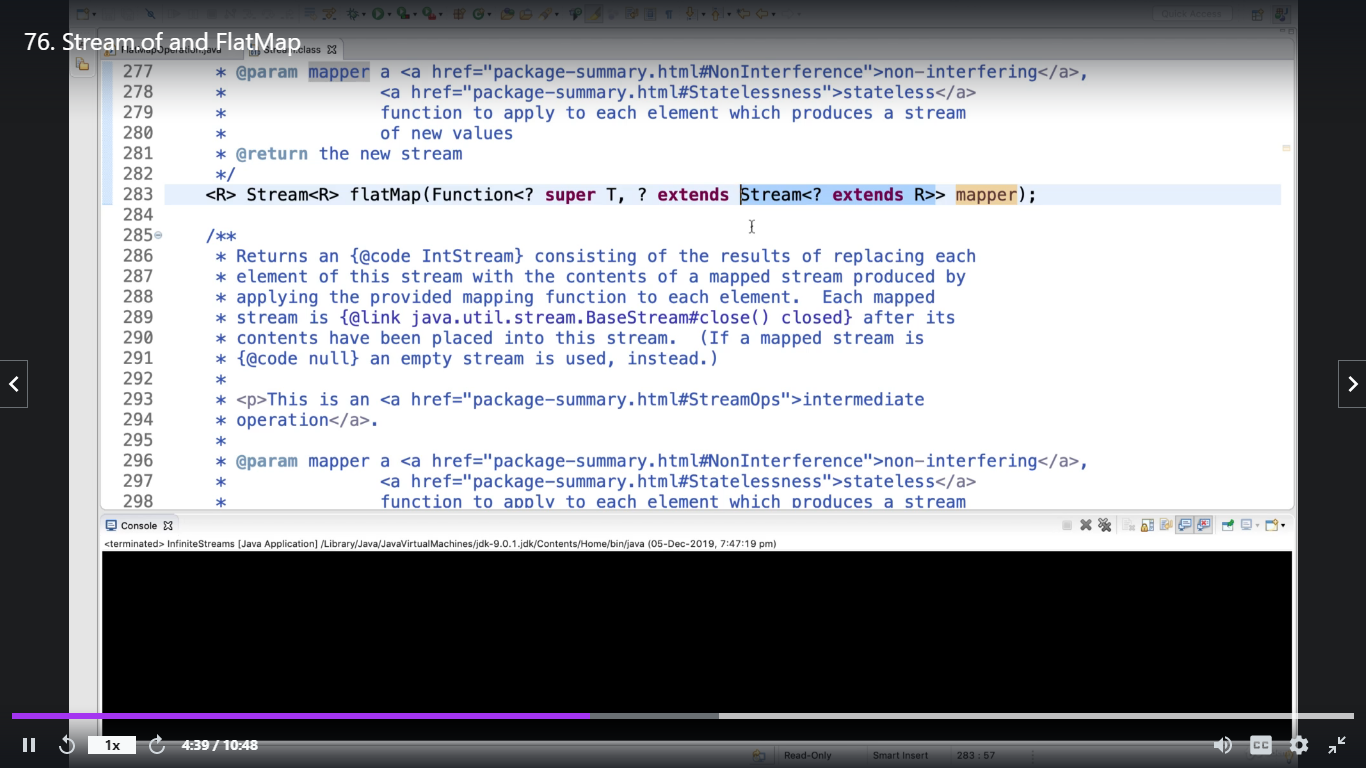


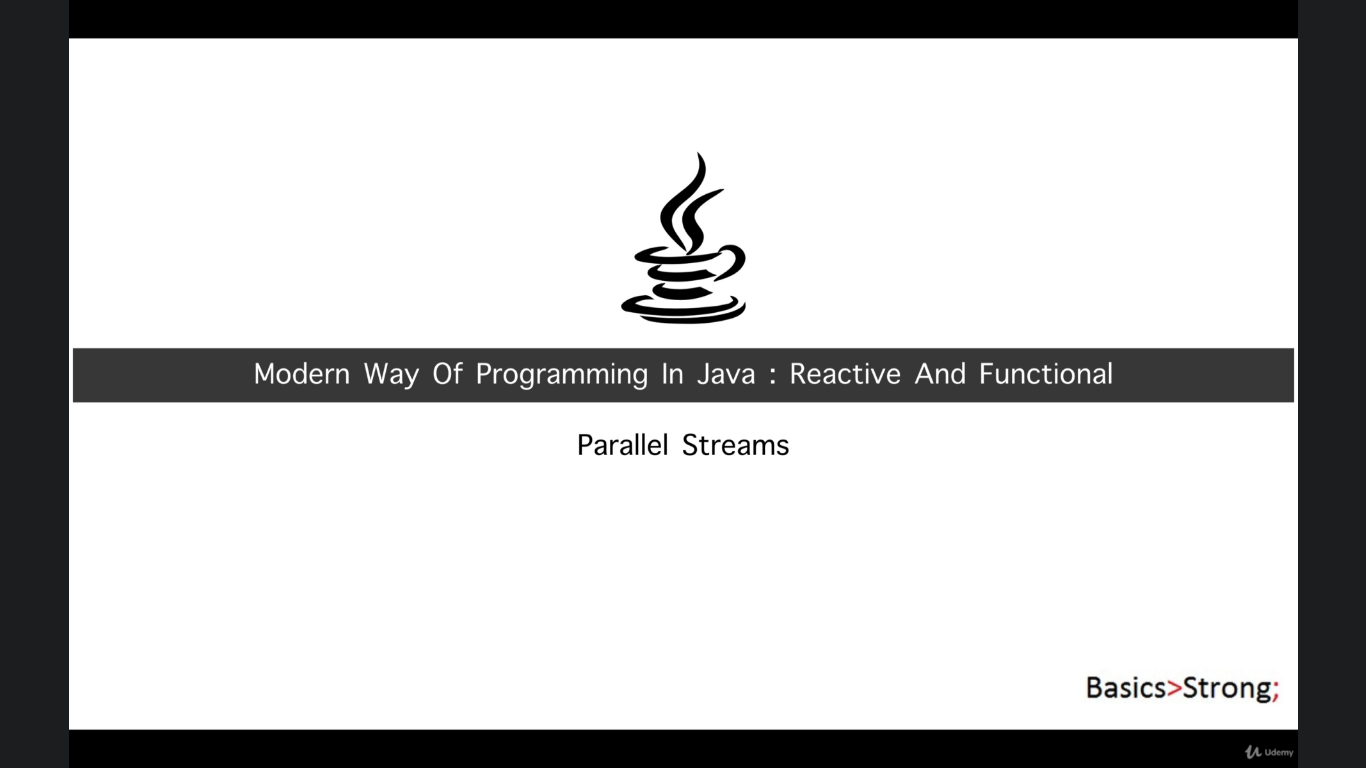




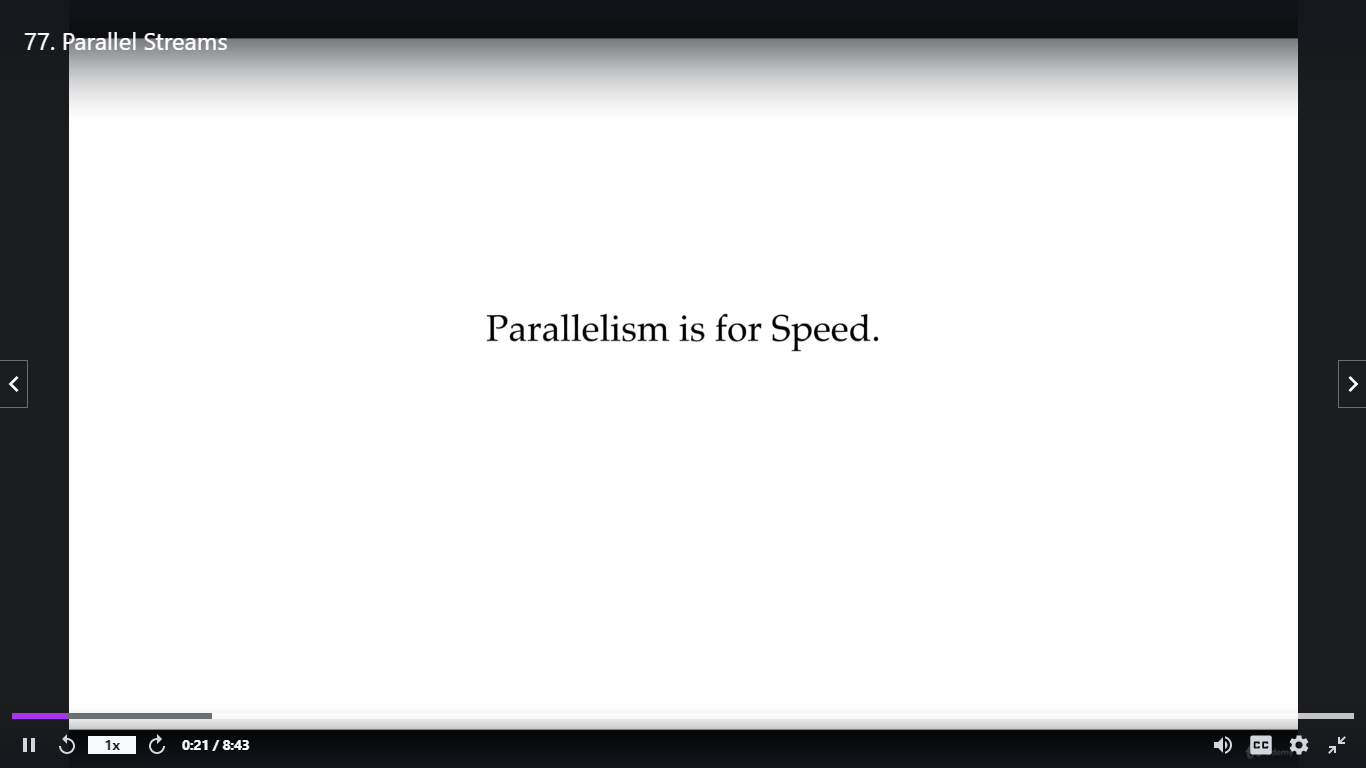


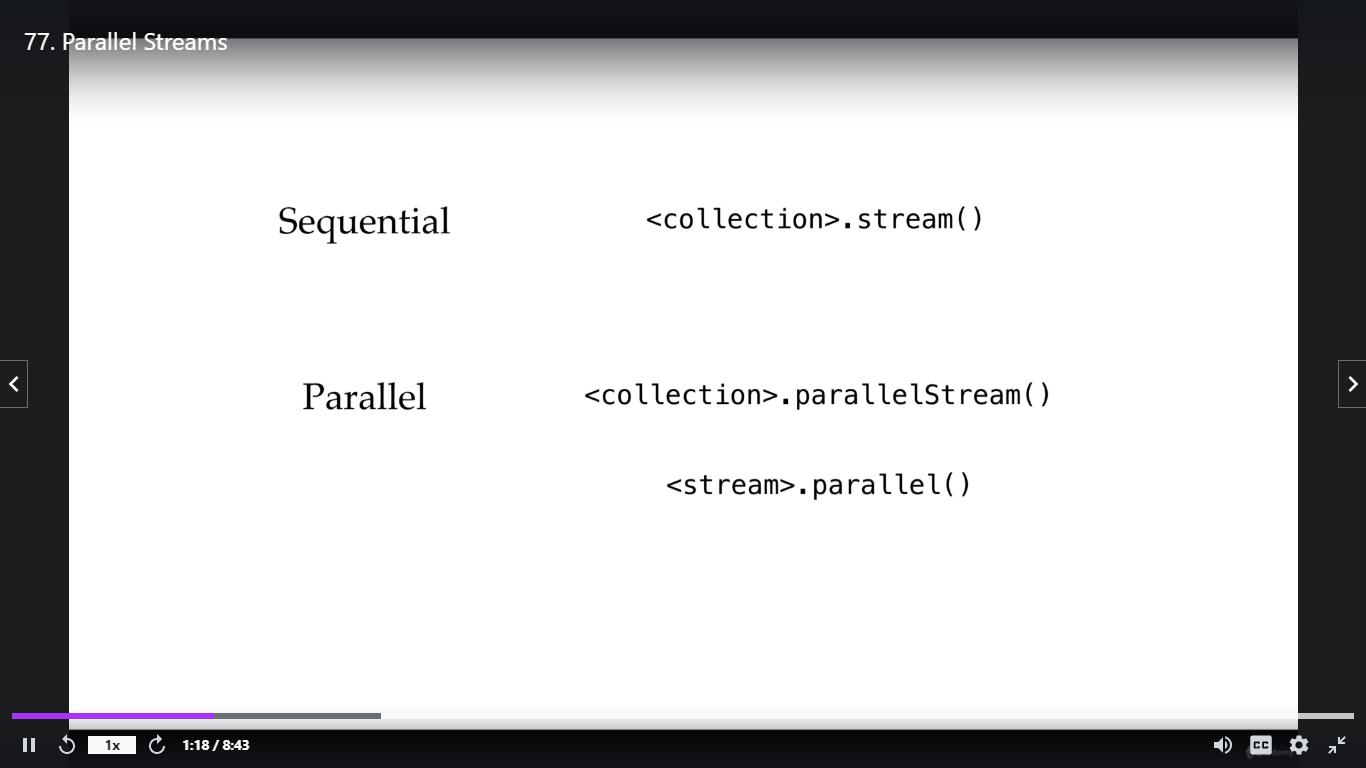






In parallel Stream we can execute the code faster without any effort





Parallel stream is fast but it is not easy to select stream or parallel stream…need to take care below…since it is costly.

It is more better to use sequential and if anything gives problem and we found parallel resolve it then use parallel stream otherwise avoid it

