Applying Key Operators in the Observable Class: Case Study ex3 (Part 2)

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Learning Objectives in this Part of the Lesson

- Part 2 of case study ex3 shows how to use RxJava Observable operators map(), fromCallable(), generate(), flatMap(), collectInfo(), subscribeOn(), take(), & Schedulers.computation() to create, reduce, multiply, & display BigFraction objects asynchronously using the flatMap() concurrency idiom.

```java
return Observable
    .generate(emitter)
    .take(sMAX_FRACTIONS)
    .flatMap(unreducedFraction ->
        reduceAndMultiplyFraction(unreducedFraction,
            Schedulers.computation()))
    .collect(toList())
    .flatMapCompletable(list ->
        sortAndPrintList(list, sb));
```

See [github.com/douglasraigschmidt/LiveLessons/tree/master/Reactive/Observable/ex3](https://github.com/douglasraigschmidt/LiveLessons/tree/master/Reactive/Observable/ex3)
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- It also shows how these operators can be used with Single operators fromCallable(), doOnSuccess(), flatMapCompletable(), ambArray(), ignoreElement(), & subscribeOn()

```java
Single<List<BigFraction>> qSort = Single.fromCallable(() -> quickSort(list))
    .subscribeOn(Schedulers.computation());

Single<List<BigFraction>> hSort = Single.fromCallable(() -> heapSort(list))
    .subscribeOn(Schedulers.computation());

return Single.ambArray(qSort, hSort)
    .doOnSuccess(displayList)
    .ignoreElement();
```

Applying Key Operators in the Observable Class to ex3
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See [github.com/douglasraigschmidt/LiveLessons/tree/master/Reactive/Observable/ex3](https://github.com/douglasraigschmidt/LiveLessons/tree/master/Reactive/Observable/ex3)
End of Applying Key Methods in the Observable Class: Case Study ex3 (Part 2)