

1)

Started : A service is started when an application component, such as an activity, starts it by calling `startService()`. Once started, a service can run in the background indefinitely, even if the component that started it is destroyed

Bound : A service is bound when an application component binds to it by calling `bindService()`. A bound service offers a client-server interface that allows components to interact with the service, send requests, get results, and even do so across processes with interprocess communication

2)

Range creates an observable with a sequence of generated number from a starting number with the length

Map transform the items emitted by an Observable by applying a function to each item

The FlatMap operator transforms an Observable by applying a function that you specify to each item emitted by the source Observable, where that function returns an Observable that itself emits items. FlatMap then merges the emissions of these resulting Observables, emitting these merged results as its own sequence.

3) RxJava 2.0 has been completely rewritten from scratch on top of the Reactive-Streams specification. The specification itself has evolved out of RxJava 1.x and provides a common baseline for reactive systems and libraries.

Because Reactive-Streams has a different architecture, it mandates changes to some well known RxJava types.

RxJava2 has better performance and low memory usage

4)

An observer needs to subscribe to an observable to see the results emitted from that observable, become a subscriber to that observable

5)

The client would send the server requests for data. The server would then processes the request and handle it accordingly.