Exercise 8

1. subscribe() is an Observable type method. The Observable type is a utility that sends data to a range of components or services that have subscribed to the observable asynchronously or synchronously. You call the subscribe() function of the observable you built, passing an observer, to execute it and start receiving alerts.
2. Operators are functions that build on the foundation of observables to allow for complex collection manipulation. RxJS, for example, has operators like map(), filter(), concat(), and flatMap(). Pipes can be used to connect operators. Pipes allow you to mix numerous functions into one.
3. In Angular debounceTime is a RxJS operator that emits latest value from the source Observable after a given time span has passed without another source emission.
4. distinctUntilChanged emits all items emitted by the source observable that are distinct by comparison from the previous item. By default, it uses simple comparison operator that doesn't check any keys, so object references must match for an object to be considered the same.