Promises

* They are use to perform asynchronous request such as Http Request
* Promises make it easier to write Asynchronous code compared to using callbacks and many libraries.
* Promises are incorporated in ES6 official spec.

Observable and RxJS

* We can structure our application to use observables , as the backbone of our data architecture. Using observable to structure our data is called reactive programming.
* Reactive programming is a way to work with async stream of data.
* Observable are main data structure use to implement Reactive Programming.
* It is same as Promises but Promises can generated single value but observable can generate multiple values or stream of values.
* Angular Implemented using RxJS which Reactive Extension of JS.

Difference between Promises and Observable

* Promises returns single value while observable can be use to return multiple values.
* Promises are much easier to use and implement while observable is more powerful and give more options while working with async programming.
* Observable gives us option like cancelling an operation by unsubscribing it. Also you can set the timeout for the observable.
* Observable really shines when getting stream of values rather than single value.