**Java-8 – Difference between filter & map**

* **How to get/create stream object:**

Stream s = c.stream();

C -> Any collection object.

stream() -> This method present inside Collection interface as default method.

Stream -> It is an interface present in java.util.stream package. This interface introduced in Java 1.8

After getting the filter we have to do the following steps to do the processing:

1. Configuration.

Configuration is done through two ways:

Filter mechanism

Map mechanism

1. Processing.

* **Filtering:**

If we want to filter elements from the collection based on some boolean condition, then we should go for filtering.

We can configure Filter by using filter() method of Stream interface.

public Stream filter(Predicate<T> t);

Predicate<T> -> It can be a boolean valued function or

Lambda expression.

Example: Stream s1 = c.stream().filter(I -> i%2 == 0);

* **Mapping:**

If we want to create a separate new object for every object present in the collection based on some function then we should go for mapping mechanism.

We can implement mapping by using map() method of Stream interface.

public Stream map(Function<T, R> f);

Example:

Stream s1 = c.stream().map(I -> I \* 2);

Note:

With filter there will be a difference in the number of input object and output object.

With map both the input and output collection element count will be same.