**Streams:**

Source -> Filter -> Sort -> Map -> Collect

Intermediate Operations (filter, map or sort) return a stream.

Terminal operations (forEach, collect or reduce) are either void or return a non-stream result.

Intermediate Operations:

findFirst(): allows computing on infinite streams completing in finite time

anyMatch():

filter(lambda): filters out elements not fulfilling the lambdaExpr and creates a new Stream with the remaining elements. Does not modify the Source(Stream itself)

distinct(): returns a stream consisting of the distinct elements(deletes multiple elements). E.g:

for List (1, 1, 2, 3, 3, 4, 5, 5)

Outputs:

1, 2, 3, 4, 5

flatmap(IntFunction): Applies a IntFunction on all elements of the stream and produces a new one consisting the outcoming elements (“flattens” a List to 1 “level”). E.g:

The list before flattening :

[ [2, 3, 5], [7, 11, 13], [17, 19, 23] ]

After flattening:

[ 2, 3, 5, 7, 11, 13, 17, 19, 23 ]

map(lambda): changes the values by the lambdaExpr. E.G (x -> x\*2) on [1, 2, 3] will return [2, 4, 6]

skip(n): skips the first n elements of the stream

sorted(): sorts Stream in its natural order(alphabetically REVERSE for Strings)

sorted(Lambda): sorts Stream according to LambdaExpr. E.g:

aList.add(new Point(10, 20));

        aList.add(new Point(5, 10));

        aList.add(new Point(1, 100));

        aList.add(new Point(50, 2000));

aList.stream()

        .sorted((p1, p2)->p1.x.compareTo(p2.x))

.forEach(System.out::println);

Outputs:

1, 100

5, 10

10, 20

50, 2000

Terminal Operations:

count(): returns the count of elements in this stream

min(): returns OptionalInt describing the minimum element of this stream, or else an empty Optional if stream is empty.

max(): returns OptionalInt describing the maximum element of this stream, or else an empty Optional if stream is empty.

reduce(binop op): Performs reduction on all elements of the stream, using an associative accumulation function. Returns an OptionalInt.

sum (): returns the sum of all elements in the stream