Tutorial 3a – Map, FlatMap and Filter Transforms in Apache Beam:

Map:

- Applies a **simple 1-to-1 mapping** function over each element in the collection.

FlatMap:

- Applies a **simple 1-to-many mapping** function over each element in the collection. The many elements are flattened into the resulting collection.

Filter:

- Given a predicate, filter out all elements that don't satisfy that predicate. May also be used to filter based on an inequality with a given value based on the comparison ordering of the element.

Lambda:

- A lambda function is a small anonymous function. A lambda function can take any number of arguments, but can only have one expression.
    - lambda arguments: expression

Resources:

- https://beam.apache.org/documentation/transforms/python/elementwise/map/
- https://beam.apache.org/documentation/transforms/python/elementwise/flatmap/
- https://beam.apache.org/documentation/transforms/python/elementwise/filter/#example-2-filtering-with-a-lambda-function