

KIP-160: Augment KStream.print(), KStream.writeAsText() to allow users pass in extra parameters in the printed string

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Status

Current state: *Accepted*

Discussion thread: [here](#)

JIRA: [here](#)

Please keep the discussion on the mailing list rather than commenting on the wiki (wiki discussions get unwieldy fast).

Motivation

KStream#print() prints records on console; But the output from KStream#print() is fixed, some user maybe want to customize it.

To do this, one good method is KStream#print(KeyValueMapper<K, V, String>).

For now, KStream.print() fixes output string as:

```
"[" + this.streamName + "]: " +keyToPrint + ", " + valueToPrint
```

And some users are asking to argument KStream#print() so that they can customize the output string as KStream#print(KeyValueMapper<K, V, String>):

```
"[" + this.streamName + "]: " + mapper.apply(keyToPrint, valueToPrint)
```

With above idea, we also can apply this on KStream#writeAsText() to allow user customized output string written to file.

Public Interfaces

Expanding KStream#print() and KStream#writeAsText() which also need to be extended another version of print.

```

void print(final KeyValueMapper<? super K, ? super V, String> mapper);

void print(final KeyValueMapper<? super K, ? super V, String> mapper, final String streamName);

void print(final KeyValueMapper<? super K, ? super V, String> mapper, final Serde<K> keySerde, final Serde<V> valSerde);

void print(final KeyValueMapper<? super K, ? super V, String> mapper, final Serde<K> keySerde, final Serde<V> valSerde, final String streamName);

void writeAsText(final String filePath, final KeyValueMapper<? super K, ? super V, String> mapper);

void writeAsText(final String filePath, final String streamName, final KeyValueMapper<? super K, ? super V, String> mapper);

void writeAsText(final String filePath, final Serde<K> keySerde, final Serde<V> valSerde, final KeyValueMapper<? super K, ? super V, String> mapper);

void writeAsText(final String filePath, String streamName, final Serde<K> keySerde, final Serde<V> valSerde, final KeyValueMapper<? super K, ? super V, String> mapper);

```

Proposed Changes

A straightforward first pass is on [GitHub PR#3085](#).

Compatibility, Deprecation, and Migration Plan

No compatibility issues foreseen.

Rejected Alternatives

Base on `KStream#print()` and `KStream#writeAsText()`, some users seek for a new option which can customize the output but not should be restricted by fixed format.

To let user can customize output we think argument `KStream#print()` and `KStream#writeAsText()` is best option for usage(Intuition) and implementation (expand exist method with adding argument).