Example: repartitioning

- [KAFKA-8846] JIRA issue

- Repartitioning causes unexpected output

- Without repartitioning, expected output is returned

- TestTopologyDriver returns expected output

Side-effects

- Inevitably your stream may have to perform some side-effects (HTTP call, db lookup/write)

- Lose guarantees/properties of Kafka (eg, processing guarantees, notion of time)

- Side effects + replaying messages = :(

- Get out of jail card: idempotent/append only calls