Besides functional testing of every DataPipe, tests should include:

- Test if DataPipe resets correctly (#65067)
  - Order of the outputs should be consistent between iterations

```
dp = create_dp()
list1 = list(dp)
list2 = list(dp)
```

- Test if DataPipe iterators are independent (should not be expected in multiprocessing, but good coding pattern)
- Test if DataPipe is [serializable](#)
- Test if DataPipe has `__len__` correctly implemented or throws an expected error
- Test if DataPipe is lazy (serialized size is 'reasonable')
- Test how DataPipe works in deterministic context
- Test if DataPipes creates properly linked DataPipes graph
- Test if DataPipe is picklable (using pickle or dill)
  - Test if it is still picklable after the DataPipe has been iterated through.

Ideally, there are examples and helper functions for each of these requirements.

TODO: Some of these requirements are only relevant for `IterDataPipe`, we also need to requirements for `MapDataPipe`.