Test cases description

KVMarshallerTest

KVMarshallerTest.testMarshall	 testing the marshall logic for general values
KVMarshallerTest.testMarshallSpecialCharact ers	 testing marshall logic when the mar- shall values has special characters that are part of the message proto- col

KVUnmarshallerTest

KVUnmarshallerTest.testUnmarshall	 testing the unmarshall logic for general values
KVUnmarshallerTest.testUnmarshallScpecialC haracters1	 testing unmarshall logic when the un- marshall values has special characters that are part of the message proto- col
KVUnmarshallerTest.testUnmarshallScpecialC haracters2	 testing unmarshall logic when the un- marshall values has special characters that are part of the message protocol
KVUnmarshallerTest.testUnmarshallScpecialC haracters3	 testing unmarshall logic when the un- marshall values has special characters that are part of the message protocol
KVUnmarshallerTest.testUnmarshallScpecialC haracters4	 testing unmarshall logic when the un- marshall values has special characters that are part of the message protocol
KVUnmarshallerTest.testUnmarshallScpecialC haracters5	 testing unmarshall logic when the un- marshall values has special characters that are part of the message proto- col
KVUnmarshallerTest.testUnmarshallScpecialC haracters6	 testing unmarshall logic when the un- marshall values has special characters that are part of the message protocol
KVUnmarshallerTest.testInvalidMessage	 testing unmarshall logic when mes- sage type is wrong
KVUnmarshallerTest.testEmptyMessage	 testing unmarshall logic when the key value is empty
KVUnmarshallerTest.testMessageWithSpaces	 testing unmarshall logic when the un- marshall values has spaces

FifoCacheTest

FifoCacheTest.addToCacheTest	 test the logic of adding a key value pair to the cache
FifoCacheTest.getFromCacheForExistingKeyT est	 test the logic when getting the value for an existing key
FifoCacheTest.getFromCacheForNonExistin-gKeyTest	 test the logic when trying to get the value for non existing key
FifoCacheTest.addToCacheReplaceTest	 test the cache replace logic when the cache is full

LFUCacheTest

LFUCacheTest.addToCacheTest	 test the logic of adding a key value pair to the cache
LFUCacheTest.getFromCacheForExistingKeyT est	 test the logic when getting the value for an existing key
LFUCacheTest.getFromCacheForNonExistin-gKeyTest	 test the logic when trying to get the value for non existing key
LFUCacheTest.addToCacheReplaceTest	 test the cache replace logic when the cache is full

LRUCacheTest

LRUCacheTest.addToCacheTest	 test the logic of adding a key value pair to the cache
LRUCacheTest.getFromCacheForExistingKey Test	 test the logic when getting the value for an existing key
LRUCacheTest.getFromCacheForNonExistin-gKeyTest	 test the logic when trying to get the value for non existing key
LRUCacheTest.addToCacheReplaceLogicTest	 test the cache replace logic when the cache is full

SimpleKeyValueStoreTest

SimpleKeyValueStoreTest.shouldGetValue	 test get value logic from the database for a given key
SimpleKeyValueStoreTest.shouldGetMultipleV alues	 test multiple consecutive retrievals for keys works correctly

SimpleKeyValueStoreTest.shouldReturnCor- rectValuesForHasKey	 test whether the hasKey() method works properly
SimpleKeyValueStoreTest.shouldThrowKeyNot Found	 test the proper exception is thrown when trying to retrieve non existent key
SimpleKeyValueStoreTest.shouldWriteValues	 test the logic of writing to the database works properly for a given key value pair
SimpleKeyValueStoreTest.readWrites	 test that the written key value pairs can be read after
SimpleKeyValueStoreTest.readMultipleWrites	 test that the written multiple key value pairs can be read after

${\bf Random Access Key Value Store Test}$

RandomAccessKeyValueStoreTest.should-GetValue	 test get value logic from the database for a given key
RandomAccessKeyValueStoreTest.shouldGet MultipleValues	 test multiple consecutive retrievals for keys works correctly
RandomAccessKeyValueStoreTest.shouldReturnCorrectValuesForHasKey	 test whether the hasKey() method works properly
RandomAccessKeyValueStoreTest.shouldThrowKeyNotFound	 test the proper exception is thrown when trying to retrieve non existent key
RandomAccessKeyValueStoreTest.shouldWrit eFile	 test the logic of writing to the database works properly for a given key value pair
RandomAccessKeyValueStoreTest.shouldDele teValue	 test the logic of deleting a key value pair works properly
RandomAccessKeyValueStoreTest.shouldDele teValueAndReadOthers	 test that when there are multiple key value pairs in the database and when delete one, others can be read without error
RandomAccessKeyValueStoreTest.shouldUpd ateValue	 test that the value is updated properly for an existing key