Comment:

The trick used in the test file is creating a class named FakeFileDataSource which implements the DataSource interface. This allows the test to check the decorator's functionality without having to use a real file.

FakeFileDataSource

- name: String
- data: String

+ FakeFileDataSource(String name):
+ writeData(String data): void
+ readData(): String

FileDataSource

- name: String

+ FileDataSource(String name):
+ writeData(String data): void
+ readData(): String

<<Interface>>
DataSource

+ writeData(String data):
+ readData(): String

DataSourceDecorator

- wrappee: DataSource

DataSourceDecorator(DataSource source):
+ writeData(String data): void
+ readData(): String

Extends

Extends

EncryptionDecorator

+ EncryptionDecorator(DataSource source):
+ writeData(String data): void
+ readData(): String
+ encode(String data): String
+ decode(String data): String

CompressionDecorator

+ CompressionDecorator(DataSource source):
+ getCompressionLevel(): int
+ setCompressionLevel(int value): void
+ writeData(String data): void
+ readData(): String
+ compress(String stringData): String
+ decompress(String stringData): String