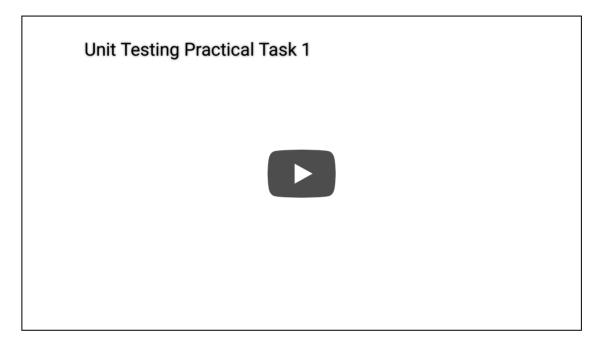
Practical Testing

Instructions: Practical Improving existing code and Unit Testing (mp3)
(https://canvas.qub.ac.uk/courses/11041/files/1582028/download?wrap=1)
(https://canvas.qub.ac.uk/courses/11041/files/1582028/download?download_frd=1)

Code to download and add to etc... mp3.java
(https://canvas.qub.ac.uk/courses/11041/files/1582027/download?wrap=1)
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Video solutions....



Note in these videos I am using **JUnit 4** so some small changes to update to **Junit 5(Jupiter)**, specifically

- 1. @BeforeEach rather than @Before in the setUp method with the Test class.
- 2. Exception handling is no longer:

```
@Test (Expected = Exception.class) - JUNIT 4
```

The **assertThrows** statement takes care of that one (and means you can combine Exception based test cases.. which is very efficient and worthwhile in Junit 5).

```
void testInvalidRating() {
    // test for low invalid value
    assertThrows(IllegalArgumentException.class, () -> {
```

```
mp3.setRating(ratingInvalidLower);
});
```

```
// test for high invalid value
assertThrows(IllegalArgumentException.class, () -> {
   mp3.setRating(ratingInvalidHigher);
});
}
```

Unit Testing Practical Task 2

