

1) The Song class contains two equals() methods. Explain the difference using your knowledge about inheritance.

The `equals(Object o)` method overrides the equals method of the Object class. Since the Song class is a subclass of the Object class, the Song class inherits the equals method from the Object class. If we want to change the behavior of the equals method in the Song class we must override it.

The `equals(Song o)` overloads the equals method so that it behaves differently when used with an argument of type Song.

2) Why do we need the version of equals() that takes an Object as the parameter in this class?

The equals() method is a method of the Object class and has signature

```
public boolean equals(Object o)
```

Therefore we must use the same signature in order to override the method. If we only define the

```
public boolean equals(Song s)
```

method, then it will overload the method but not override it.

This could be a problem because other classes may call the `equals(Object o)` method instead, causing unintended behavior.