COMP8710 Class 5.2 – Processing streams (2)

Introduction

In this class, we will finish rewriting our music library code (continued from Class 5.1).

Setup

Open your **MusicTracks** project from Class 5.1. We will continue with the same project.

Task

1. Add a few additional methods at the beginning of PART II of MusicLibrary. Tests for all these are included in class Main, commented out. Uncomment them as you go along to test. The methods to add are:

    a) `int getFirstYearOf(String artist)`: Return the publication year of the first track found by the given artist.

    b) `void printThreeOf(String artist)`: Print the first three tracks found by the given artist.

    c) `int getMaxPlayCount()`: Return the highest play count of any track.

    d) `void printFirstWith(String substring)`: Print the title of the first track where the title contains the substring.

    e) `long countNewerThan(int year)`: Return the number of tracks published in or after the given year.

    In any of the methods above, if no result exists, return a default value, e.g. -1 or "Not found".

    Make sure that `removeUnwanted` remains the last method called, since it modifies your library (and all other methods should be tested on the full library).

2. Rewrite the existing methods in PART II (`getNewerThan, getLongestSong, removeUnwanted`). As before, your code should not contain any loops. Test thoroughly.

Finishing

Make sure you complete the exercises. Ask for help if you have difficulty. Make sure you can write this kind of code.