



C++ Exercise Introduction

As part of today's interview, you'll be working through the exercise below. Two of our developers will work through the design with you. After the design discussion, you'll have some time independently to code the solution, at which point they'll review it with you.



SIG Coding Exercise

The local library is expanding to provide movies, and wants to create a catalog and recommendation system to allow patrons easier access.

To start, the librarians have a comma-delimited file with the following information on each movie:

- Title
- Publication year
- List of Genres (pipe-delimited)

Sample Data:

```
#movieId,title,date,genres
```

```
1,Toy Story,1995,Adventure|Animation|Children|Comedy|Fantasy
```

```
2,Jumanji,1995,Adventure|Children|Fantasy
```

```
3,Grumpier Old Men,1995,Comedy|Romance
```

Part 1: Please optimize the function/class that allows patrons to request a list of potential movies from a specific genre and range of years released.

Your initial function must follow the basic definition given below. For more specific definitions, please check out your language's Solution class containing the sample function specifications.

```
GetMovies(Genre, Start Year, End Year)
```

Returns a list or similar object in your language containing an object with the following structure:

```
Movie { Id, Title }
```

The dates you receive in the query should be treated inclusively.

There is not one correct solution to this exercise. You may assume that the input file contains only clean data. If there are any libraries you would like to use or packages you would like to reference, feel free to include them.