Assignment 1 — Part 3

Movie Application

You were hired to create a movie storage application, that will allow users to manage their movie collection and find any movie they want.

Here's the three main features:

1. First, the application must allow to add new movies to the collection;
2. The application must allow users to view all the movies in their collection;
3. The application must also allow users to find any particular movie by any of its attributes (more info in the next page...)

What are movies?

Movies will be dictionaries, but you can define the structure of the dictionary to be anything you like. For example, you may choose to have movies as dictionaries with only three keys:

```
{ 'name': 'The Matrix', 'director': 'Wachowskis', 'year': '1994' }
```

Or you may choose to have more keys (in the example below, also including which shelf and location the movie is in):

```
{ 'name': 'The Matrix', 'director': 'Wachowskis', 'year': '1994', 'location': '3F-14', 'shelf': '3F' }
```

Where will movies be stored?

It's up to you where movies will be stored, as long as you can then print them, retrieve them, and find them. A good potential structure could be a list. If you are familiar with files and storing things in files, go for that!

What's that about finding movies?

Once you have the movie structure defined, users should be able to e.g. "find all movies released in 1994". Or, "find all movies by director Rolf Smith".

That means the user must be able to tell you what property they are looking for (is it year, director , or something else); and also they must be able to tell you what they're looking for (1994 , or Rolf Smith in the examples above).

With both the property and the value, you'll be able to find all movies which match both. It's tricky! Spend some time, and I'm sure you'll get it. If you can demonstrate that you have put in some effort on your own already, but still don't get it them I will be able to share a hint with you (same hint for everybody).

Some general hints:

1. Segment the task into several smaller functions and create one big function called main() that calls these other functions
2. Use the input() function for collecting individual data fields from users, don't ask them to input entire movie dictionaries