

## 17.03 Assignment Instructions

**Instructions:** For this assignment, you are going to create some sorting methods that use selection sort.

1. Create a folder called **17.03 Assignment** in your module 17 assignments folder. Copy your movie class **Movie.java** to your 17.03 Assignment folder.
2. You are to create a class called **TestMovie3** and save it as **TestMovie3.java**.
  - a. Make sure that you create an array called **myMovies**. Add the following movies:

Title	Year	Studio
The Muppets Take Manhattan	2001	Columbia Tristar
Mulan Special Edition	2004	Disney
Shrek 2	2004	Dreamworks
The Incredibles	2004	Pixar
Nanny McPhee	2006	Universal
The Curse of the Were-Rabbit	2006	Aardman
Ice Age	2002	20th Century Fox
Lilo & Stitch	2002	Disney
Robots	2005	20th Century Fox
Monsters Inc.	2001	Pixar

- b. Create a method called **printMovies()** that traverses through the array and prints out each element.
- c. Create a method called **sortTitles()** that selection sorts the array according to **title**. It should have two arguments: the array, and an int parameter where 1 means ascending and 2 means descending. Your method should sort appropriately depending on the value of the second parameter (ascending or descending).
- d. Create a method called **sortYears()** that selection sorts the array according to **year**. It should have two arguments: the array, and an int parameter where 1 means ascending and 2 means descending. Your method should sort appropriately depending on the value of the second parameter (ascending or descending).
- e. Create a method called **sortStudios()** that selection sorts the array according to **studio**. It should have two arguments: the array, and an int parameter where 1 means ascending and 2 means descending. Your method should sort appropriately depending on the value of the second parameter (ascending or descending).
- f. Test your methods, showing array without sort first, next sort by title descending and show output, then sort by year descending and show output, and finally sort by studio ascending and show output. Your output will be similar to that shown below:



