

File Reading Practice

Activity 1: IMDB

Write a program that reads from the file `imdb.txt` and searches it for a keyword. The file is organized in the following way:

```
rank rating votes title (year)
```

You should ask the user what to search for then display ALL titles that contain that text. Here is a sample run (user input is underlined):

```
Search word? american
35    186234    8.5  American Beauty (1999)
41    124313    8.5  American History X (1998)
94    11482     8.2  American Gangster (2007)
3 matches.
```

You should exactly reproduce the format shown above. Remember that tabs are represented as `\t` in Python. In other words, your output should be as follows:

```
rank votes      rating  title (year)
```

Notice that the search is case insensitive. The trickiest part will be searching the entire title. Here is one way to do it:

1. Split each line of input
2. You know that the title always starts at index 3 of the split line
3. Use the string join method. This joins the parts of a list together into a string separated by the string it's called on. Here is the code you need:

```
title = " ".join(tokens[3:])
```

What this does is squish together all parts of the title into one string separated by spaces.

Activity 2: Connect the dots

Read in a file called `"dots.txt"` containing x- and y-coordinates. You should use Turtle Graphics to plot all the points, and to draw a straight line between every two dots.

The text file will be in the format:

```
24    25
48    20
pen up
```

```
4      54
-12    34
...
```

The numbers will be spaced by a tab. Or a "\t" character.

The numbers on the left represent the x-coordinate and the value on the right represents the y-coordinate. You may assume that there will always be both an x- and y-coordinate.

When you see the String "pen up" you should not draw a line from the last dot plotted and the next dot in the file.

(For example, in the example above, you would draw a line between (24,25) and (48,20) and then there would be no line in between (48,20) and (4,54).)

Remember to think about type for your variables! When you read things in from a file, they are initially strings, so you will need to make them into ints in order to use them as points.