## **RegEx Exercises for the Class**

Hello happy classmates! At the end of the class, Eric mentioned the dot operator.

The dot operator, which uses the period key, matches any character. (Note: it does not match the newline by default but that isn't relevant to these exercises.)

Since I didn't discuss it in class, you can read up on the dot operator here.

The 'Use the Dot Sparingly' section discusses potential problems with overusing the dot operator. I have updated regex\_demo.py to give you examples of code that use the dot operator in the regular expression.

The Python Software Foundation's article, <u>Regular Expressions HOW TO</u>, provides enough information to program any of these exercises. (I hope! I haven't gotten them all working yet.)

**Note**: These exercises are also described in regex\_exercises.py

**Exercise**: Parse the title and author from 'The Stone Sky, by N.K. Jemisin' **Note**: This is similar to the 'Jack and Jill' parsing example in regex\_demo.py

**Expected Result:** 

Title: 'The Stone Sky'Author: 'N.K. Jemisin'

**Exercise**: Parse the title and author from ' The Stone Sky, by N.K. Jemisin'

**Note**: adding whitespace at the start of the line

**Expected Result:** 

Title: 'The Stone Sky'Author: 'N.K. Jemisin'

Exercise: Parse the title, author, and publisher from the line ' The Stone Sky, by N.K. Jemisin (Orbit)'

**Note**: adding the publisher

**Expected Result:** 

Title: 'The Stone Sky'Author: 'N.K. Jemisin'Publisher: 'Orbit'

**Exercise**: Parse publishers from a variety of lines **Note**: adds metacharacters to the pattern string

Input String	Expected Result
' (Orbit)'	'Orbit'
' (Tor.com Publishing)'	'Tor.com Publishing'
'(Uncanny, March/April 2017)'	'Uncanny, March/April 2017'
'(Harper Voyager / Spectrum Literary Agency)'	'Harper Voyager / Spectrum Literary Agency'
'(Twelfth Planet Press)'	'Twelfth Planet Press'

**Exercise**: Parse "And Then There Were (N-One)," by Sarah Pinsker (Uncanny, March/April 2017)'

**Note**: adding metacharacters to the title

**Expected Results:** 

• Title: 'And Then There Were (N-One)'

• Author: 'Sarah Pinsker'

• Publisher: '(Uncanny, March/April 2017)'

Exercise: Parse 'Binti: Home, by Nnedi Okorafor (Tor.com Publishing)'

## **Expected Results:**

Title: 'Binti: Home'Author: 'Nnedi Okorafor'

• Publisher: 'Tor.com Publishing'

**Exercise**: Parse "Children of Thorns, Children of Water," by Aliette de Bodard (Uncanny, July-August 2017)'

**Note**: Adding a comma to the tile adds a complication because a comma is part of our separator pattern. You will need to use a negative lookahead assertion which you can read about here: https://docs.python.org/2/howto/regex.html

## **Expected Results:**

• Title: 'Children of Thorns, Children of Water'

Author: 'Aliette de Bodard'

• Publisher: 'Uncanny, July-August 2017'

**Exercise**: Parse ' Luminescent Threads: Connections to Octavia E. Butler, edited by Alexandra Pierce, and Mimi Mondal (Twelfth Planet Press)'

**Note**: Adding a new, and optional, element to the separator pattern. Also adding a second author **Expected Results**:

- Title: 'Luminescent Threads: Connections to Octavia E. Butler'
- Author: 'Alexandra Pierce, and Mimi Mondal'
- Publisher: 'Twelfth Planet Press'

**Exercise**: Write a pattern that can parse all these strings. That is, the same pattern should work on 'The Stone Sky, by N.K. Jemisin' and ' Luminescent Threads: Connections to Octavia E. Butler, edited by Alexandra Pierce, and Mimi Mondal (Twelfth Planet Press)' and each string in betweenFor

**Exercise**: parse title, author, and publisher for each title in hugo\_2018.txt