

Assignment 3 : Version control systems/Latex

Emil Sharifullin, Innopolis University

October 10, 2016

1 Create a unix regular expression to show all lines that contain URI's in a html file. (hrefs ...)

For this purposes I created following regular expression:

```
1 <[>]+(:?href|codebase|cite|src|background|action|longdesc|src|profile|
  ↳ usemap|classid|formaction|icon|manifest|poster).*
```

1.1 Use wget to retrieve a page

```
1 wget www.csszengarden.com
```

1.2 Use grep -E

```
1 <<<<<<< HEAD
2 cat index . html | grep -Ei
  ↳ "<[>]+(:?href|codebase|cite|src|background|action|longdesc|src|
  ↳ profile|usemap| classid|formaction|icon|manifest|poster).* "
3 =====
4 cat index.html | grep -E "<[>]+?(?:?
  ↳ href|codebase|cite|src|background|action|longdesc|src
  ↳ |profile|usemap|classid|formaction|icon|manifest|poster).*"
5 >>>>>> 4fc5f1cbe61db3d277d29e2d8533aff2640f59ea
```

1.3 Parsing www.csszengarden.com

Results of parsing:

```
1 <link rel="stylesheet" media="screen" href="/214/214.css?v=8may2013">
2 <link rel="alternate" type="application/rss+xml" title="RSS"
  ↳ href="http://www.csszengarden.com/zengarden.xml">
3 <script src="script/html5shiv.js"></script>
```

4 <p>Download the example <a href="/examples/index" title="This page's
↪ source HTML code, not to be modified.">html file and <a
↪ href="/examples/style.css" title="This page's sample CSS, the file you
↪ may modify.">css file</p>

5 <p>Strong visual design has always been our focus. You are modifying
↪ this page, so strong <abbr title="Cascading Style Sheets">CSS</abbr>
↪ skills are necessary too, but the example files are commented well
↪ enough that even <abbr title="Cascading Style Sheets">CSS</abbr> novices
↪ can use them as starting points. Please see the <a
↪ href="http://www.mezzoblue.com/zengarden/resources/" title="A listing of
↪ CSS-related resources"><abbr title="Cascading Style Sheets">CSS</abbr>
↪ Resource Guide for advanced tutorials and tips on working with <abbr
↪ title="Cascading Style Sheets">CSS</abbr>.</p>

6 <p>Download the sample <a href="/examples/index" title="This page's
↪ source HTML code, not to be modified.">HTML and <a
↪ href="/examples/style.css" title="This page's sample CSS, the file you
↪ may modify.">CSS to work on a copy locally. Once you have completed
↪ your masterpiece (and please, don't submit half-finished work)
↪ upload your <abbr title="Cascading Style Sheets">CSS</abbr> file to a
↪ web server under your control. <a
↪ href="http://www.mezzoblue.com/zengarden/submit/" title="Use the contact
↪ form to send us your CSS file">Send us a link to an archive of that
↪ file and all associated assets, and if we choose to use it we will
↪ download it and place it on our server.</p>

7 <p>This is a learning exercise as well as a demonstration. You retain
↪ full copyright on your graphics (with limited exceptions, see <a
↪ href="http://www.mezzoblue.com/zengarden/submit/guidelines/">submission
↪ guidelines), but we ask you release your <abbr title="Cascading
↪ Style Sheets">CSS</abbr> under a Creative Commons license identical to
↪ the <a href="http://creativecommons.org/licenses/by-nc-sa/3.0/"
↪ title="View the Zen Garden's license information.">one on this site
↪ so that others may learn from your work.</p>

8 <p role="contentinfo">By Dave
↪ Shea. Bandwidth graciously donated by <a
↪ href="http://www.mediatemple.net/">mediatemple. Now available: <a
↪ href="http://www.amazon.com/exec/obidos/ASIN/0321303474/mezzoblue-20/">Zen
↪ Garden, the book.</p>

9 <a href="http://validator.w3.org/check/referer" title="Check the
↪ validity of this site's HTML" class="zen-validate-html">HTML

```

10     <a href="http://jigsaw.w3.org/css-validator/check/referer"
↪ title="Check the validity of this site's CSS"
↪ class="zen-validate-css">CSS</a>
11     <a href="http://creativecommons.org/licenses/by-nc-sa/3.0/"
↪ title="View the Creative Commons license of this site:
↪ Attribution-NonCommercial-ShareAlike." class="zen-license">CC</a>
12     <a href="http://mezzoblue.com/zengarden/faq/#aaa" title="Read about
↪ the accessibility of this site" class="zen-accessibility">A11y</a>
13     <a href="https://github.com/mezzoblue/csszengarden.com" title="Fork
↪ this site on Github" class="zen-github">GH</a>
14     <a href="/221/" class="design-name">Mid Century Modern</a> by
↪ <a href="http://andrewlohman.com/" class="designer-name">Andrew
↪ Lohman</a>
15     <a href="/220/" class="design-name">Garments</a> by
↪ <a href="http://danielmall.com/" class="designer-name">Dan Mall</a>
16     <a href="/219/" class="design-name">Steel</a> by <a
↪ href="http://steffen-knoeller.de" class="designer-name">Steffen
↪ Knoeller</a>
17     <a href="/218/" class="design-name">Apothecary</a> by
↪ <a href="http://trentwalton.com" class="designer-name">Trent Walton</a>
18     <a href="/217/" class="design-name">Screen Filler</a> by
↪ <a href="http://elliottjaystocks.com/" class="designer-name">Elliot Jay
↪ Stocks</a>
19     <a href="/216/" class="design-name">Fountain Kiss</a> by
↪ <a href="http://jeremycarlson.com" class="designer-name">Jeremy
↪ Carlson</a>
20     <a href="/215/" class="design-name">A Robot Named Jimmy</a> by
↪ <a href="http://meltmedia.com/" class="designer-name">meltmedia</a>
21     <a href="/214/" class="design-name">Verde Moderna</a> by
↪ <a href="http://www.mezzoblue.com/" class="designer-name">Dave Shea</a>
22     <a href="/214/page1">
23     <a href="http://www.mezzoblue.com/zengarden/alldesigns/"
↪ title="View every submission to the Zen Garden.">
24     <a href="/214/214.css" title="View the source CSS file of the
↪ currently-viewed design.">
25     <a href="http://www.mezzoblue.com/zengarden/resources/"
↪ title="Links to great sites with information on using CSS.">
26     <a href="http://www.mezzoblue.com/zengarden/faq/" title="A list
↪ of Frequently Asked Questions about the Zen Garden.">
27     <a href="http://www.mezzoblue.com/zengarden/submit/" title="Send
↪ in your own CSS file.">

```

28

```
<a href="http://www.mezzoblu.com/zengarden/translations/"
↪ title="View translated versions of this page.">
```

2 Dutch telephone numbers

For matching telephone numbers I designed following regular expression: 1

```
(((\+[ ]?|00[ ]?)?(31[ ]?20[ ]?)
```

```
1 $ cat numbers
2 +31205257414
3 31205257414
4 0205257514
5 0031205257514
6 +31 20 525 7514
7 00 31 525 75 14
8 (020) 525 75 14
```

```
1 $ cat numbers | grep -E '(((\+[ ]?|00[ ]?)?(31[ ]?20[ ]?)|([ ]?020[ ]?)?([ ]?)))([0-9]{7})'
↪ ]?))([0-9]{7})'
2 +31205257414
3 31205257414
4 0205257514
5 0031205257514
6 +31 20 525 7514
7 00 31 20 525 75 14
8 (020) 525 75 14
```

iiiiiii HEAD

3 Create a regexp to match VISA card correctly.

To match VISA cards I created following regexp: 1

```
^4[0-9]{3}[\-]?(:?[0-9]{4}[\-]?){2}([0-9]{1}|[0-9]{2})
```

cards can contain 13, 16, 19 symbols and only VISA card can start with 4.

```

1 $ cat cards
2 4024 0071 4424 7433
3 4024007144247433
4 4024007144247433123
5 4024 0071 4424 7433 123
6 4716357221230
7 4716-3572-2123-0
8 4175000226933423
9 4175-0002-2693-3423
10 $ cat cards | grep -E '^4[0-9]{3}[ \-]?(:?[0-9]{4}[
    ↳ \-]?){2}([0-9]{1}|[0-9]{4})([ \-]?[0-9]{3})?$',
11 4024 0071 4424 7433
12 4024007144247433
13 4024007144247433123
14 4024 0071 4424 7433 123
15 4716357221230
16 4716-3572-2123-0
17 4175000226933423
18 4175-0002-2693-3423

```

4 Create a regular expression using grep that removes all lines containing only comments from a bash script file (with your example)

To remove all comments except shebang I used this command

```

1 $ echo -e $(head -1 test.sh | grep -Ev "#[^\!]")'\n'$(tail -n +2 test.sh |
    ↳ grep -v "^[[:space:]]*#.*$")
2 #!/bin/bash
3 echo "hello world" # comment

```

4fc5f1cbe61db3d277d29e2d8533aff2640f59ea