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CSE 373

Minor Homework 2: Regular Expressions

1)

balloons	balloo
FOODY	no match
bookstore	booksto
"Look"	"Loo
PoolRoOm	PoolRo

2)

 $\b(((0[13578]|1[02])\lor(((0[1-9])|([1-2]\d))|3[0-1]))|((0[469]|11)\lor(((0[1-9])|([1-2]\d))|30))|((02)\lor((0[1-9])|(1\d)|(2[0-8]))))\lor(((19)|(20))\d)))$

3)

 $\b(\d^{02468})-\d^{3}-(\d^{13579})\b$

4)

 $\label{eq:linear_condition} $$ \left((25[0-5]) | (2[0-4]\d)| (1\d\d)| ([1-9]\d)|\d) \right). $$$

5)

- (a) /"([^"]*)"/
 - any or no sequence of characters, except for a double quote, between two doubles quotes

ex: "kjhkjh"

ex: ""

(b) $/[-+]?\d+(\.\d^*)?F\b/$

- Zero or one occurrences of either + or -,
- followed by one or more digits between 0-9 inclusive,
- followed by one or no dot,
- If dot provided then optionally followed by any number of digits,
- followed by a F,
- followed by a word bound

ex: -4.015F

ex: 4F

ex: 4.F

ex: 0000000000000.000000000F

(c) $/(\D{2,}).*\[\1\]/$

- 2 or more occurrences of any non digit characters (let's call this sequence of characters as group 1),
- Optionally followed by any number of characters except for a newline,
- followed by [,
- followed by the exact characters used in group 1,
- followed by]

Ex: abcd9[abcd]

In this example abcd would be group 1

$(d) /((.*?)\d)\s\2/$

- any number of characters, even just the empty string, except for a newline (let's call this sequence of characters group 2),
- followed by a single digit between 0-9 inclusive,
- followed by a single white space character (newline, tab, space, etc.),
- followed by the exact characters used in group 2

ex: op9 op

In this example op is group 2

(e)
$$/^{0-9}+\sqrt{d+([+-*\vee])=|([+]{2}|[-]{2}));}$$

• must start with one or more instances of a number between 0-9 inclusive,

- followed by a forward slash,
- followed by one or more instances of a number between 0-9 inclusive,
- followed by only one of the following: += or -= or *= or /= or ++ or --
- must end with a semicolon

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ex: 0/0+=;
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