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1. **Write a string for each case that would satisfy at least one match for the following regular expressions:**
    a. .abc
    b. a+b?!!1{4}
    c. .{3}a\.b
    d. \w
    e. \s
    f. \d
    g. .
    h. [abc]
    i. (abc)
    j. [a-zA-Z_\$\.]+[A-Za-z_\$0-9\.]*@[a-zA-Z_\$\.]+[a-zA-Z_\$0-9\.]*\.(com|net|org){1}
    k. \([0oOn]{1}(_|\s)[0oOn]{1}\)

Estimated Time: 2 hour.

2. **Write a regular expression that can match:**

    A. Date format <Month-string> <##day>, <####year>
        a. examples:
            i. September 29, 1972
            ii. February 99, 0001
            iii. June 04, 3000

    B. A letter followed OR preceded by a number
        a. example
            i. A52
            ii. d747
            iii. 27X
            iv. v2
    C. txt, java, and cpp files with names consisting of only letters
        a. example
            i. test.java
            ii. program.cpp
            iii. newReport.txt
    D. A 5 character palindrome
        a. example
            i. abcba
            ii. 12321
            iii. _1a1_
    E. All words that consist of letters from b to y only
        a. example
            input: “Bee zapp Crow Eagle Zorro mouse Ape you”
            output: [“Bee”,”Crow”,”mouse”,”you”]

F. All the non nested tag elements in a string
    a. example
    input: “Is 4 < -1/12 true? The answer will surprise you.”
    output: 4 < -1/12, answer, surprise

Estimated Time: 6 hour.

3. Write a program that will:

A. Shift cyclically every letter of the alphabet by one, and the numbers as well.
    a. example
        i. aBc = bCd
        ii. xyz = yza
        iii. aK89 = bL90
B. From a reasonably sized text, have a user defined string be replaced by that same string with a hashtag. That hashtag should be a link for a twitter search as well.
    a. example
        i. String: yolo
            1. … should never use #yolo for any reason...
C. Using regular expressions, create a function that will match all word palindromes of any size in a text.

Optional: Input a paragraph of text and translate it to 1337 $|>34|<

Estimated Time: 8 hour.