Python regex `finditer` function

Python regex finditer() function explained with examples.

Python string finditer

`finditer()` is a powerful function in the `re` module. It returns an iterator yielding `MatchObject` instances over all non-overlapping matches for the RE pattern in string.

Syntax

```
re.finditer(pattern, string, flags=0)
```

Here the string is scanned **left-to-right**, and matches are returned in the order found. Empty matches are included in the result unless they touch the beginning of another match.
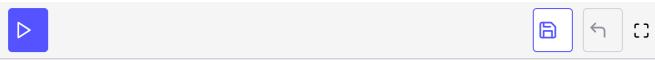
Example 1

Here is a simple example which demonstrates the use of finditer. It reads in a page of html text, finds all the occurrences of the word "**the**" and prints "the" and the following word. It also prints the character position of each match using the MatchObject's `start()` method.

```
import re
import urllib2

html = urllib2.urlopen('https://docs.python.org/2/library/re.html').read()
pattern = r'\b(the\s+\w+)\s+'
```

```
regex = re.compile(pattern, re.IGNORECASE)
for match in regex.finditer(html):
    print "%s: %s" % (match.start(), match.group(1))
```

Once you have the list of tuples, you can loop over it to do some computation for each tuple.

Expected output:

```output
3261: The Python
4210: the backslash
4451: the same
4474: the same
4651: the pattern
4679: the regular
4930: The solution
5937: The functions
6301: the standard
and so on...
```