

What is the name of the feature responsible for generating Regex objects?

```
In [2]: 1 import re
        2 re.compile('string')
        3 # The re.compile() function returns Regex objects.
```

```
Out[2]: re.compile(r'string', re.UNICODE)
```

Why do raw strings often appear in Regex objects?

```
1 - Raw strings are used so that backslashes do not have to be escaped.
```

What is the return value of the search() method?

```
1 - The search() method searches a string for a specified value, and returns the position of the match.
```

In the regex which created from the `r'(\d\d\d)-(\d\d\d-\d\d\d\d)'`, what does group zero cover?

Group 2? Group 1?

```
In [5]: 1 phoneNumRegex = re.compile(r'(\d\d\d)-(\d\d\d-\d\d\d\d)')
        2 mo = phoneNumRegex.search('My number is 345-444-4542.')
        3 mo.group(1)
```

```
Out[5]: '345'
```

```
In [6]: 1 mo.group(2)
```

```
Out[6]: '444-454'
```

```
In [8]: 1 mo.group(0)
```

```
Out[8]: '345-444-454'
```

The `findall()` method returns a string list or a list of string tuples. What causes it to return one of the two options?

```
1 -If the regex has no groups, a list of strings is returned. If the regex has
2 groups, a list of tuples of strings is returned.
```

In standard expressions, what does the `|` character mean?

```
1 The | character is called a pipe. You can use it anywhere you want to match one
  of many expressions.
2 The | character signifies matching “either, or” between two groups
```

```
In [10]: 1 SportRegex = re.compile (r'Cricket|Soccer Sport')
          2 s1 = SportRegex.search('baseball and Soccer Sport')
          3 s1.group()
```

Out[10]: 'Soccer Sport'

In regular expressions, what does the ? character stand for?

```
1 - The ? character can either mean “match zero or one of the preceding group”
```

```
In [13]: 1 batRegex = re.compile(r'Bat(wo)?man')
          2 mo1 = batRegex.search('The Adventures of Batman')
          3 mo1.group()
```

Out[13]: 'Batman'

```
In [14]: 1 mo2 = batRegex.search('The Adventures of Batwoman')
          2 mo2.group()
```

Out[14]: 'Batwoman'

In regular expressions, what is the difference between the + and * characters?

```
1 - The + matches one or more. The * matches zero or more
```

What is the difference between {4} and {4,5} in regular expression?

```
1 The {3} matches exactly three instances of the preceding group.
2
3 The {3,5} matches between three and five instances.
```

What do you mean by the \d, \w, and \s shorthand character classes signify in regular expressions?

```
1 The \d, stands for single digit, Any numeric digit from 0 to 9
2 \w, stands for single word, Any letter, numeric digit, or the underscore
  character. (Think of this as matching “word” characters.) \s stands for single
  space character, Any space, tab, or newline character. (Think of this as
  matching “space” characters.)
```

What do means by \D, \W, and \S shorthand character classes signify in regular expressions?

```
1 \D - > Any character that is not a numeric digit from 0 to 9.
2 \W - > Any character that is not a letter, numeric digit, or the underscore
  character.
3 \S - > Any character that is not a space, tab, or newline.
```

What is the syntax for matching both numbers and lowercase letters with a character class?

```
In [ ]: 1
```

