Regular Expressions

Reminder: Commonly used special symbols in Python regular expressions

Symbol	Meaning
.	matches any character
+	1 or more
*	0 or more
()	capture group
\d	digit
\D	non-digit
\s	whitespace
\S	non-whitespace
\w	alphanumeric
\W	non-alphanumeric

Character sets:
[abcd] matches the letters a, b, c, d

Character sets:
[abcd] matches the letters a, b, c, d

```
String: gray
 Regex: gr[abcd]y
```

Character sets:
[abcd] matches the letters a, b, c, d

```
String: gray
 Regex: gr[abcd]y

 Match: gray
```

Character sets:
[abcd] matches the letters a, b, c, d

```
String: grey
 Regex: gr[abcd]y
```

Character sets:
[abcd] matches the letters a, b, c, d

String: grey

Regex: gr[abcd]y

Match: *Does not match!*

A character set matches exactly one letter

```
String: -ATGGTCTA-
 Regex: -[ATGC]-
```

A character set matches exactly one letter

```
String: -ATGGTCTA-
 Regex: -[ATGC]-

 Match: Does not match!
```

A character set matches exactly one letter

```
String: -ATGGTCTA-
 Regex: -[ATGC]+-
```

A character set matches exactly one letter

```
String: -ATGGTCTA-
 Regex: -[ATGC]+-


 Match: -ATGGTCTA-
```

Negative character sets:
[^abcd] matches anything but a, b, c, d

```
String: gray
 Regex: gr[^abcd]y
```

Negative character sets:
[^abcd] matches anything but a, b, c, d

```
String: gray
 Regex: gr[^abcd]y

 Match: Does not match!
```

Negative character sets:
[^abcd] matches anything but a, b, c, d

```
String: grey
 Regex: gr[^abcd]y
```

Negative character sets:
[^abcd] matches anything but a, b, c, d

```
String: grey
 Regex: gr[^abcd]y

 Match: grey
```