# Reminder: Commonly used special symbols in Python regular expressions

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>.</td>
<td>matches any character</td>
</tr>
<tr>
<td>+</td>
<td>1 or more</td>
</tr>
<tr>
<td>*</td>
<td>0 or more</td>
</tr>
<tr>
<td>()</td>
<td>capture group</td>
</tr>
<tr>
<td>\d</td>
<td>digit</td>
</tr>
<tr>
<td>\D</td>
<td>non-digit</td>
</tr>
<tr>
<td>\s</td>
<td>whitespace</td>
</tr>
<tr>
<td>\S</td>
<td>non-whitespace</td>
</tr>
<tr>
<td>\w</td>
<td>alphanumeric</td>
</tr>
<tr>
<td>\W</td>
<td>non-alphanumeric</td>
</tr>
</tbody>
</table>
Character sets:
[abced] 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