

Matching once

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In [2]: import re

s = 'The rain in Spain falls mainly on the plain.'

match = re.search('(..)(..[pm])ain', s)
if match:
    print('The regular expression matches at least once.');
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print('The entire matching string is: "' + match.group(0)+'"')
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print('The first captured group is: "' + match.group(1)+'"')
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print('The second captured group is: "' + match.group(2)+'"')
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The regular expression matches at least once.
The entire matching string is: "in Spain"
The first captured group is: "in"
The second captured group is: " Sp"
```

In []:

Matching all

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In [34]: s='''They have a black cat, a gray elephant, a yellow snake, a brown
a gray wolf, and a white bear at the zoo.'''

# Extract all of the black or gray animals that they have at the zoo.
matches = re.findall('(black|gray) (\w+)', s);
for match in matches:
    print(match)
for i,match in enumerate(matches):
    print('Captured groups from match '+str(i)+' :'+ str(match))

('black', 'cat')
('gray', 'elephant')
('gray', 'wolf')
Captured groups from match 0 :('black', 'cat')
Captured groups from match 1 :('gray', 'elephant')
Captured groups from match 2 :('gray', 'wolf')
```

Named capture