```
In [1]: "a" in "abc"
```

```
Out[1]: True
```

```
In [2]: import re
```

```
In [3]: re.findall("a", "abc123")
```

```
Out[3]: ['a']
```

```
In [5]: re.findall("[ab]", "abc123")
```

```
Out[5]: ['a', 'b']
```

```
In [6]: re.findall("[Ab]", "abc123")
```

```
Out[6]: ['b']
```

```
In [7]: re.findall("[abc]", "abc123")
```

```
Out[7]: ['a', 'b', 'c']
```

```
In [8]: re.findall("[a-c]", "abc123")
```

```
Out[8]: ['a', 'b', 'c']
```

```
In [9]: re.findall("[a-z]", "abc123")
```

```
Out[9]: ['a', 'b', 'c']
```

```
In [10]: re.findall("[a-z]", "abcd123")
```

```
Out[10]: ['a', 'b', 'c', 'd']
```

```
In [11]: re.findall("[a-cg-z]", "abcd123")
```

```
Out[11]: ['a', 'b', 'c']
```

```
In [12]: re.findall("[a-cg-z]+", "abcd123")
```

```
Out[12]: ['abc']
```

```
In [14]: re.findall("[0-9]?", "abc123abc")
```

```
Out[14]: ['', '', '', '1', '2', '3', '', '', '', '']
```

```
In [15]: re.findall("[0-9]{0,1}", "abc123abc")
```

```
Out[15]: ['', '', '', '1', '2', '3', '', '', '', '']
```

```
In [16]: re.findall("[0-9]{0,2}", "abc123abc")
```

```
Out[16]: ['', '', '', '12', '3', '', '', '', '']

In [17]: re.findall("[0-9]{0,}", "abc123abc")

Out[17]: ['', '', '', '123', '', '', '', '']

In [18]: re.findall("[0-9]*", "abc123abc")

Out[18]: ['', '', '', '123', '', '', '', '']

In [19]: re.findall("([a-z]+)([0-9]+)", "abc123abc")

Out[19]: [('abc', '123')]

In [20]: re.findall("^[0-9]+", "123abc456def")

Out[20]: ['123']

In [23]: re.findall("[a-z]+$", "123abc456def")

Out[23]: ['def']

In [25]: re.findall("[a-z]+\\$", "123def$456abc")

Out[25]: ['def$']

In [28]: re.findall(r"[a-z]+\$", "123def$456abc")

Out[28]: ['def$']

In [29]: re.findall("[^a-z]+", "123def$456abc")

Out[29]: ['123', '$456']

In [30]: re.findall("Hello (\w+) Hello", "Hello World Hello Simon Hello Python Hello"

Out[30]: ['World', 'Python']

In [31]: re.findall("Hello (\W+) Hello", "Hello World Hello Simon Hello Python Hello"

Out[31]: []

In [33]: re.findall("Hello (\s+) Hello", "Hello World Hello   Hello Python Hello")

Out[33]: [' ']

In [34]: re.findall("Hello (\S+) Hello", "Hello World Hello   Hello Python Hello")

Out[34]: ['World', 'Python']
```

```
In [35]: re.findall("(\d+)", "abc123def")
```

```
Out[35]: ['123']
```

```
In [36]: re.findall("(\D+)", "abc123def")
```

```
Out[36]: ['abc', 'def']
```

```
In [37]: re.findall("(\w+)$", "Hello World\nHello Python")
```

```
Out[37]: ['Python']
```

```
In [38]: re.findall("(\w+)$", "Hello World\nHello Python\n", flags=re.MULTILINE)
```

```
Out[38]: ['World', 'Python']
```

```
In [42]: re.findall("Hello (\w+)$", "Hello World\nHelLo Python\n", flags=re.IGNORECAS
```

```
Out[42]: ['World', 'Python']
```

```
In [ ]:
```