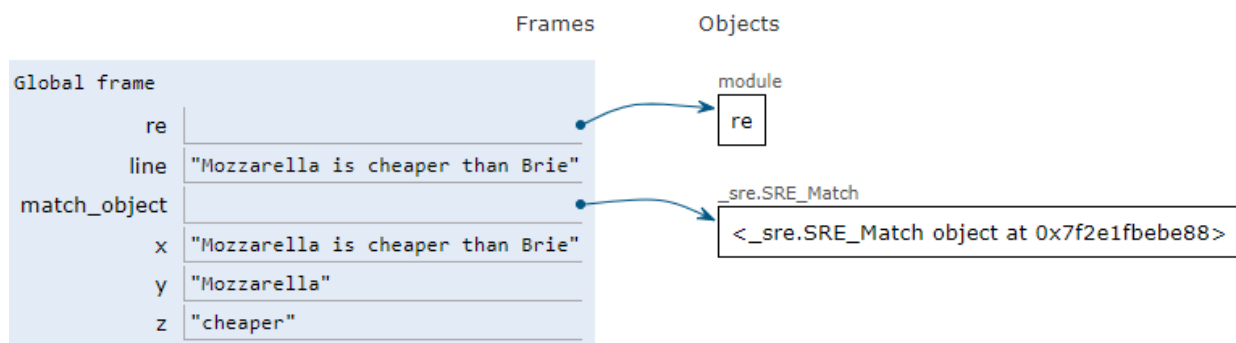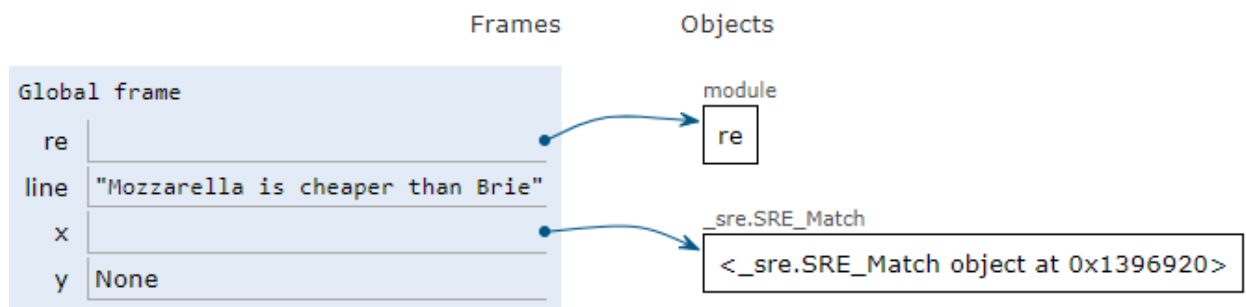# Regular Expressions

Regular Expressions: Example

```
>>> import re
>>> line = "Mozzarella is cheaper than Brie"
>>> match_object = re.match( r'(.*) is
        (.*?) .*',  line, re.M|re.I)
>>> x =  match_object.group()
>>> y =  match_object.group(1)
>>> z =  match_object.group(2)
```

```
                          Frames          Objects

Global frame                                module
        re                                    re
      line   "Mozzarella is cheaper than Brie"
match_object                              _sre.SRE_Match
        x    "Mozzarella is cheaper than Brie"   <_sre.SRE_Match object at 0x7f2e1fbebe88>
        y    "Mozzarella"
        z    "cheaper"
```

Regular Expressions: Intro

>>> import re

>>> line = "Mozzarella is cheaper than Brie"

>>> x = re.*search*("Mozzarella", line)

>>> y = re.*search*("Gouda", line)

	Frames		Objects
Global frame			module
re			re
line	"Mozzarella is cheaper than Brie"		
x			_sre.SRE_Match
y	None		<_sre.SRE_Match object at 0x1396920>

Regular Expressions

- way to describe strings patterns
- used for pattern matching
- provided by module *re*

>>> import re

>>> line = "Mozzarella is cheaper than Brie"
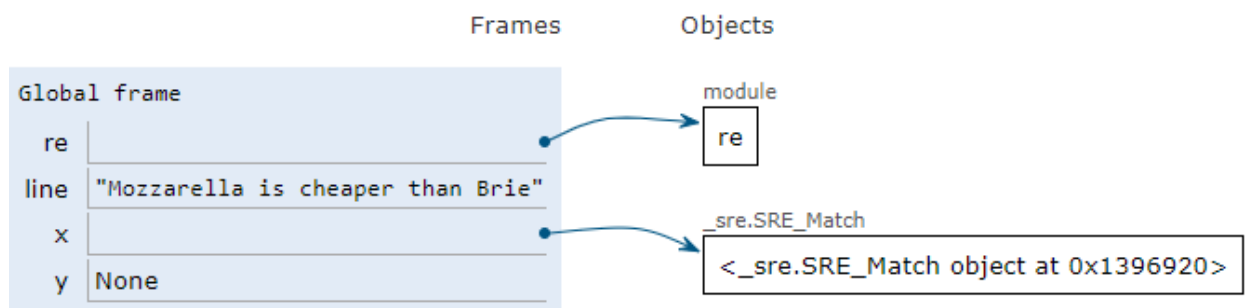
>>> match_object = re.match(r'(.*) is

(.*?) .*', line, re.M|re.I)

>>> x = match_object.group()

>>> y = match_object.group(1)

>>> z = match_object.group(2)

Regular Expressions: Intro

```
>>> import re
>>> line = "Mozzarella is cheaper than Brie"
>>> pattern = r'are'
>>> if re.match(pattern, line):
>>>     print('match')
>>> else:
>>>     print('no match')
```

Review Problems

Interview Problem

- regular expression to describe a valid email id

Interview Problem

- explain how to perform pattern matching

Interview Problem

- name few methods for matching and searching the occurrences of a pattern in a given text String