Sets and Dictionaries

Tuples

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And what does the error message mean?

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Allocate a blob of memory
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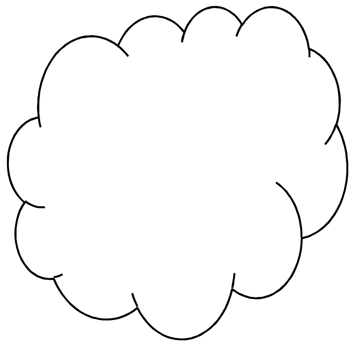

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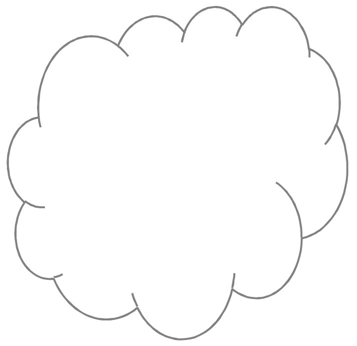
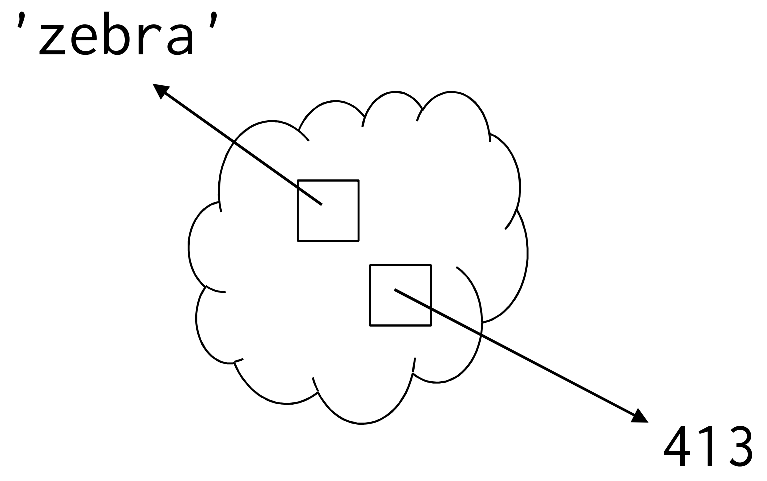


Use a *hash function* to calculate where to store each element's reference



How a string is stored

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```
"zebra"
```

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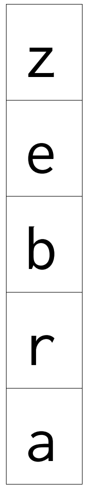
"zebra" ==



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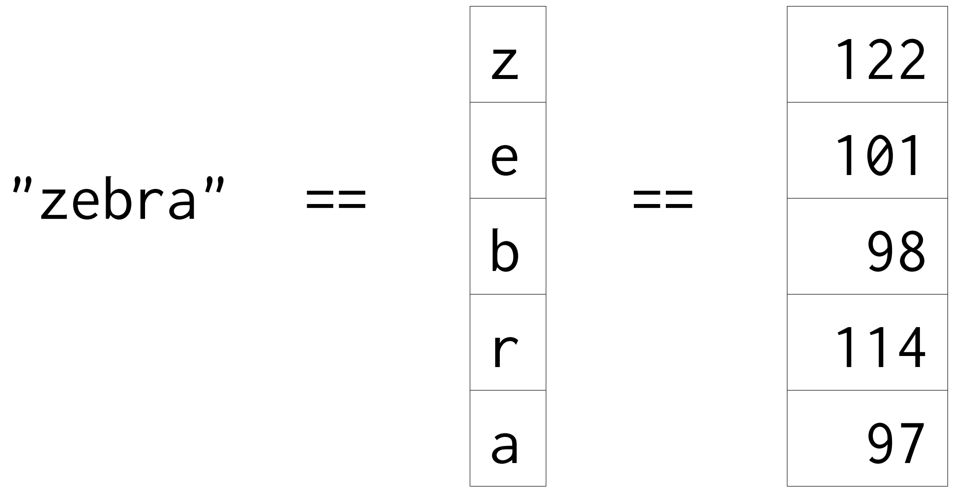

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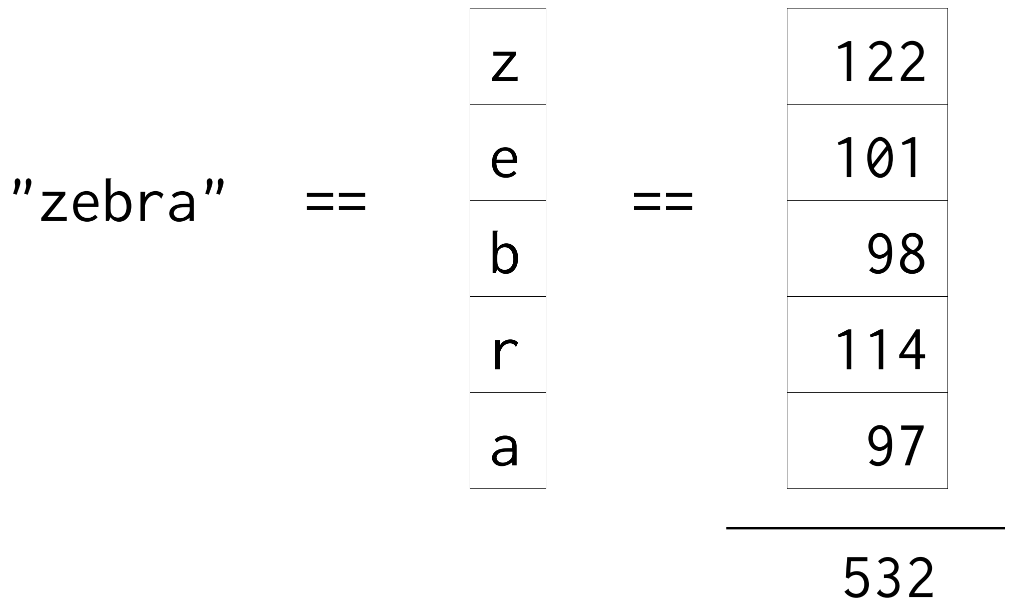

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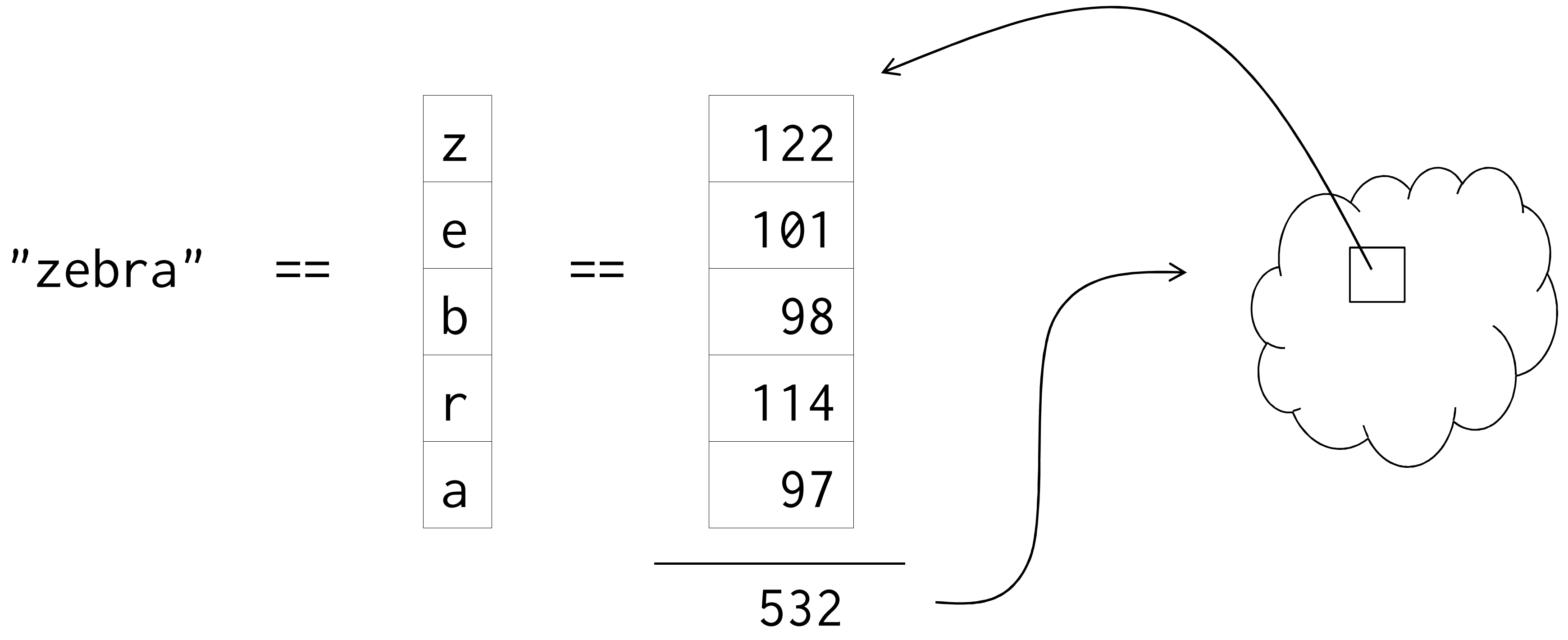

How a list would be stored (if it was allowed)

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```
['z',
 'e',
 'b',
 'r',
 'a']
```

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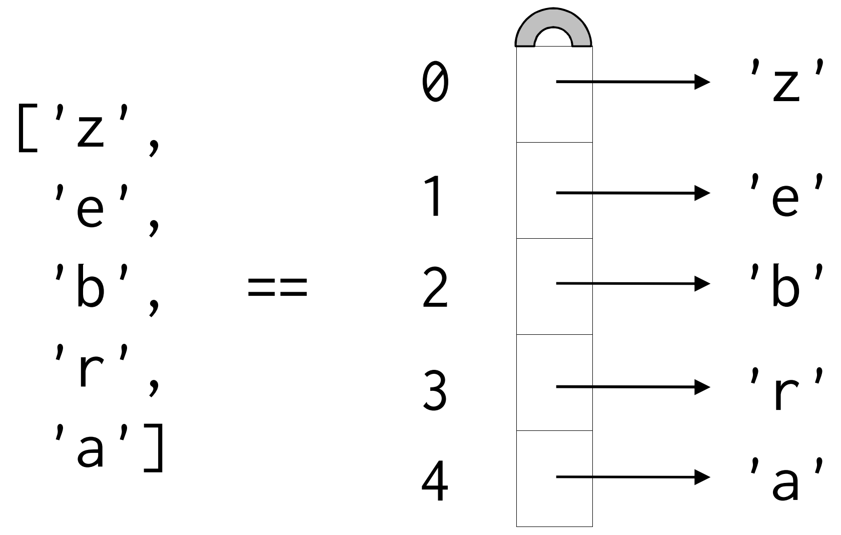

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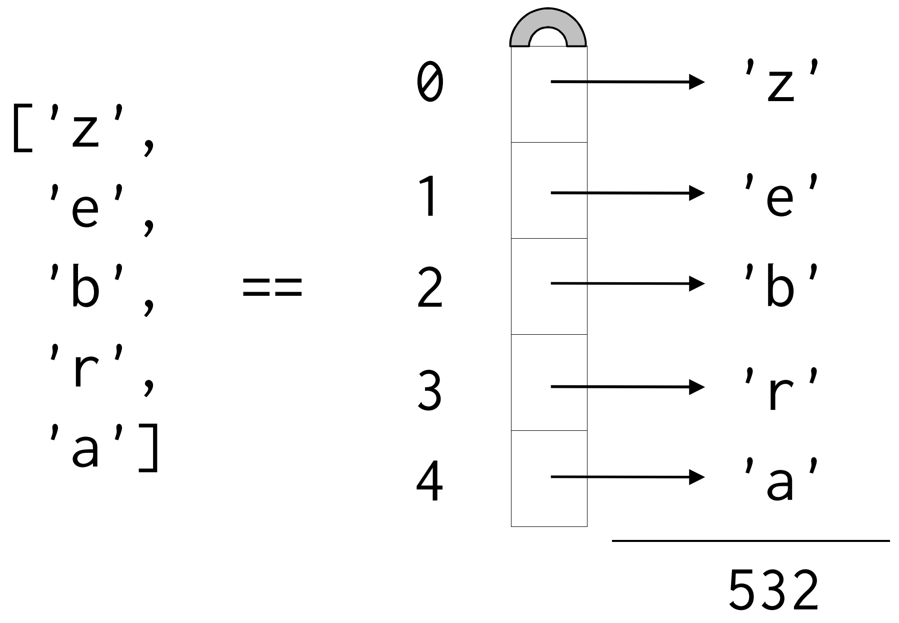

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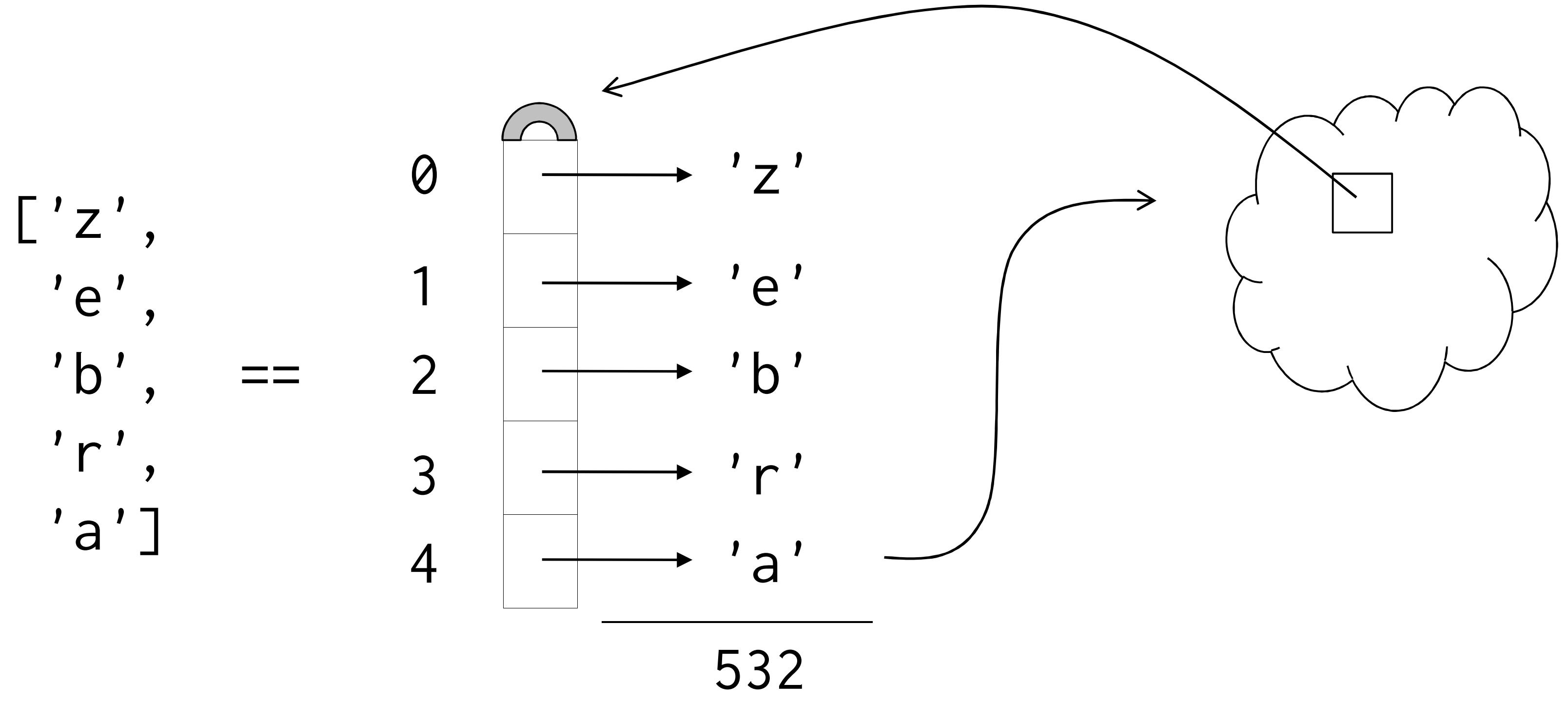

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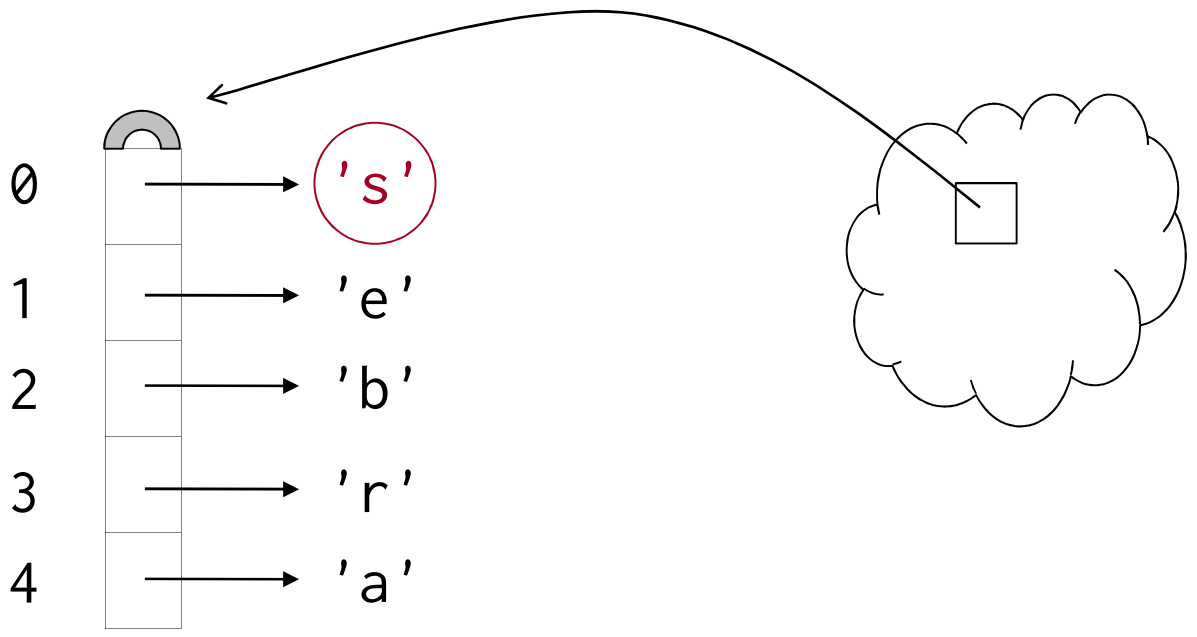

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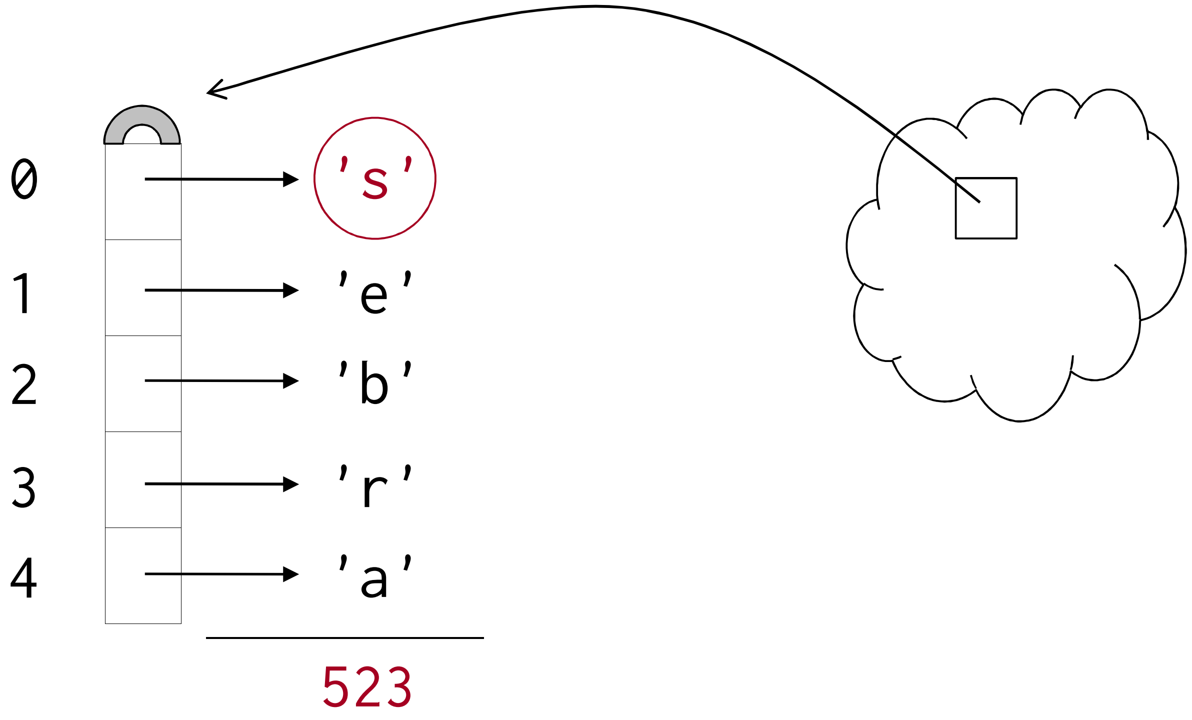

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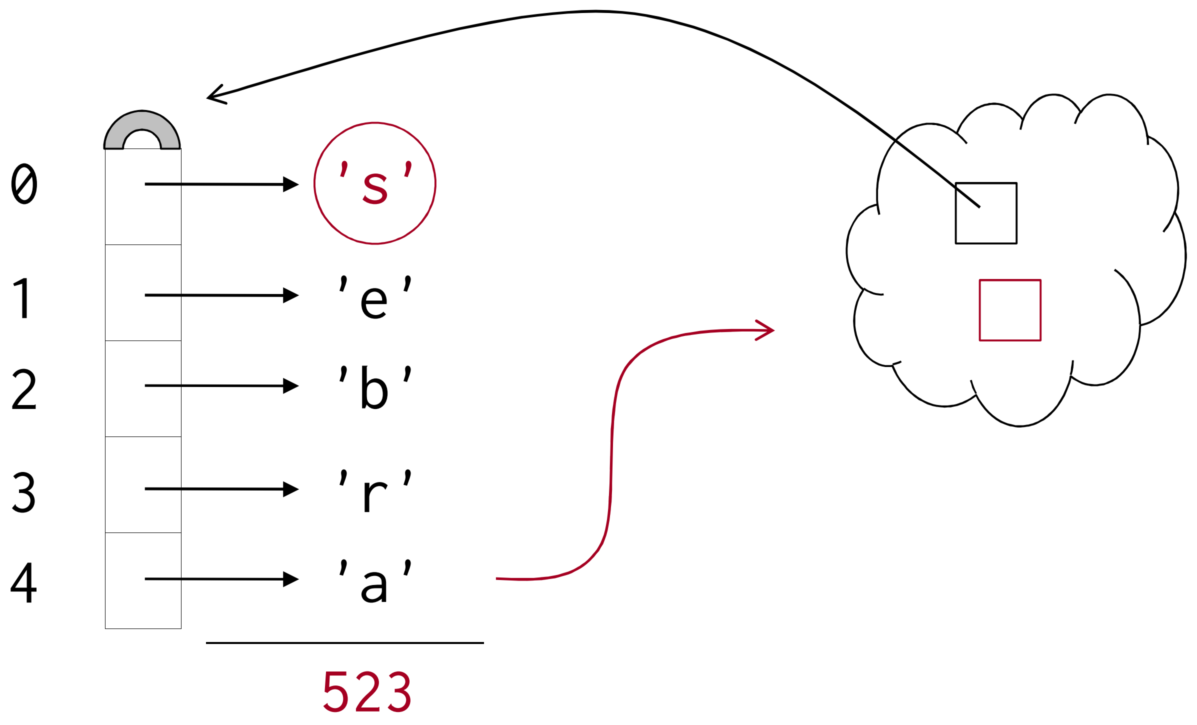

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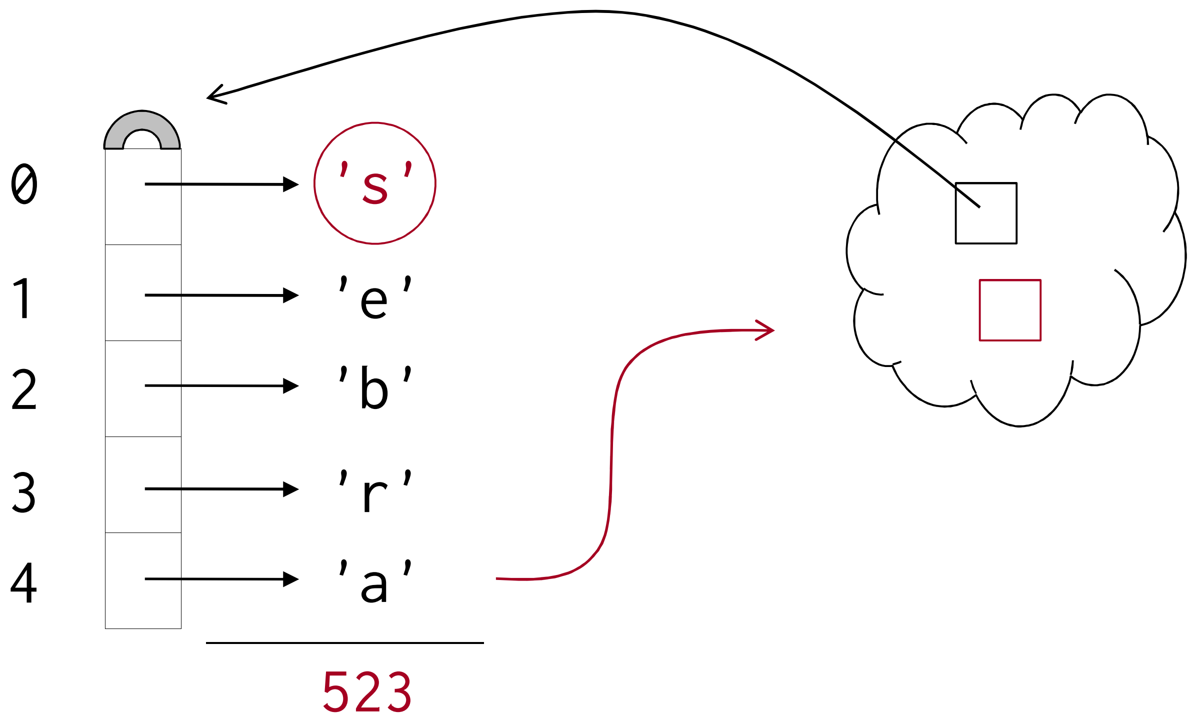

`['s,'e','b','r','a'] in S` will give a false negative!

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Slightly restrictive, but never disastrous

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Code has to be littered with joins and splits

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Use '()' instead of '[]'

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>>> full_name = ('Charles', 'Darwin')
>>> full_name[0]
Charles
```

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```
>>> full_name = ('Charles', 'Darwin')
>>> full_name[0]
Charles

>>> full_name[0] = 'Erasmus'
TypeError: 'tuple' object does not support item
assignment
```

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>>> names = set()
>>> names.add(('Charles', 'Darwin'))
>>> names
set([('Charles', 'Darwin')])
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Cannot look up partial entries

E.g., cannot look for "any tuple ending in 'Darwin'"

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Next episode will introduce a data structure that (sort of) allows this software carpentry

created by

Greg Wilson

July 2010