Data Examples

Announcements

Examples: Objects

Land Owners

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Instance attributes are found before class attributes; class attributes are inherited
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```
class Worker:
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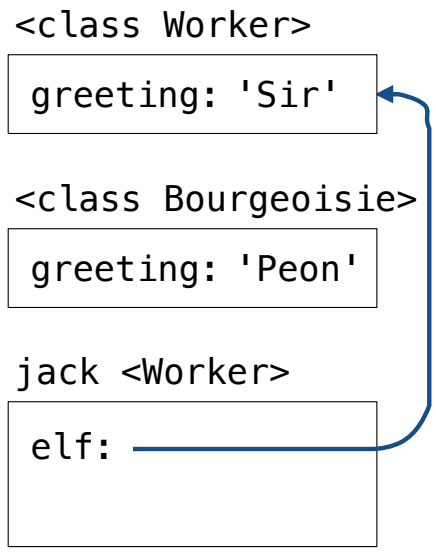

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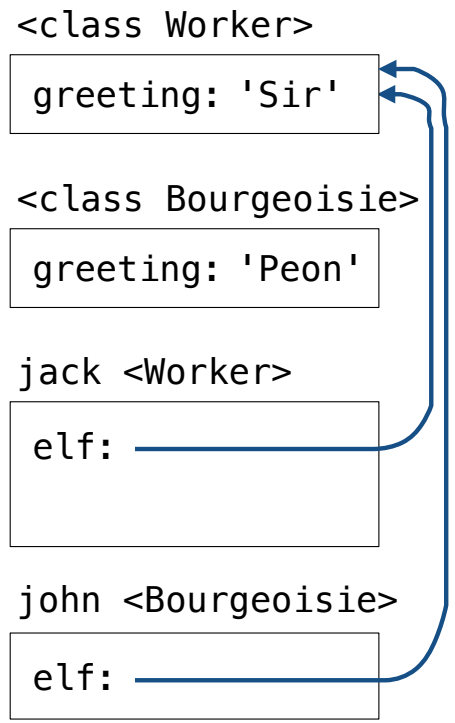

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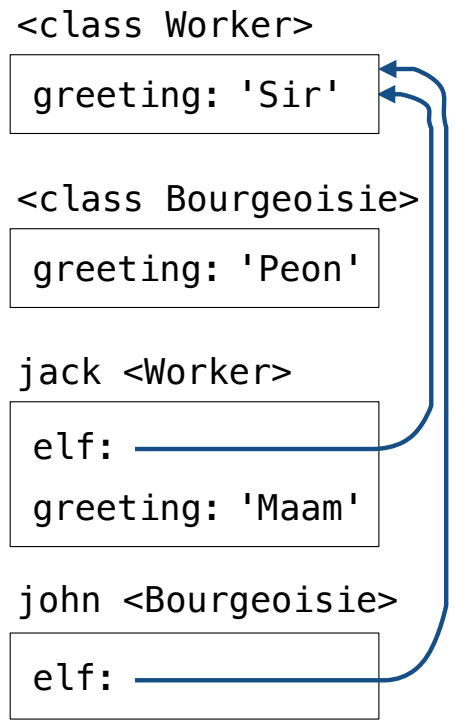

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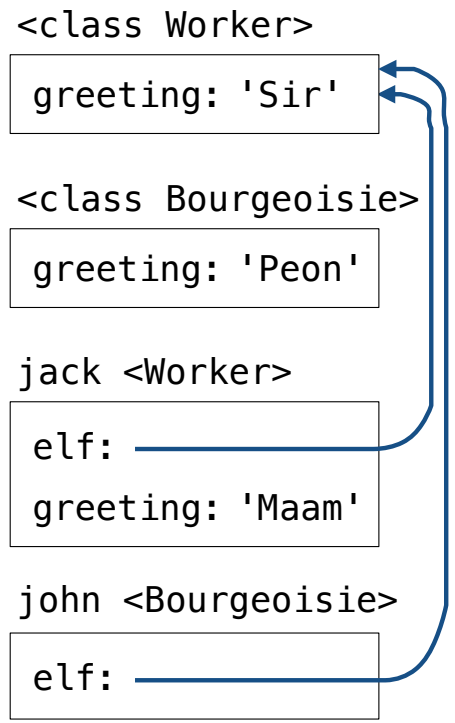

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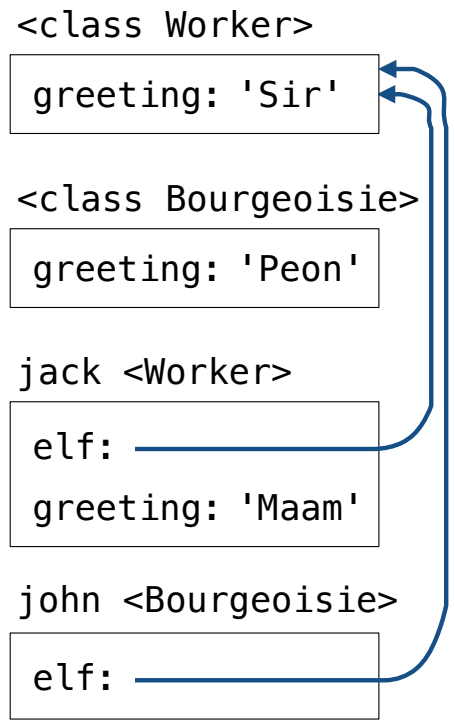

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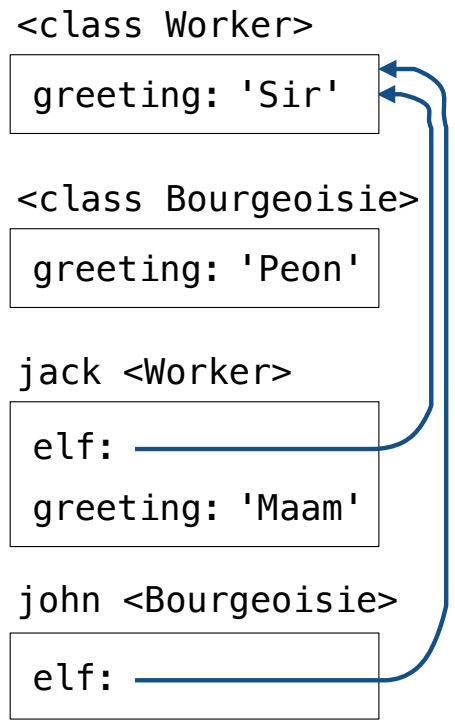

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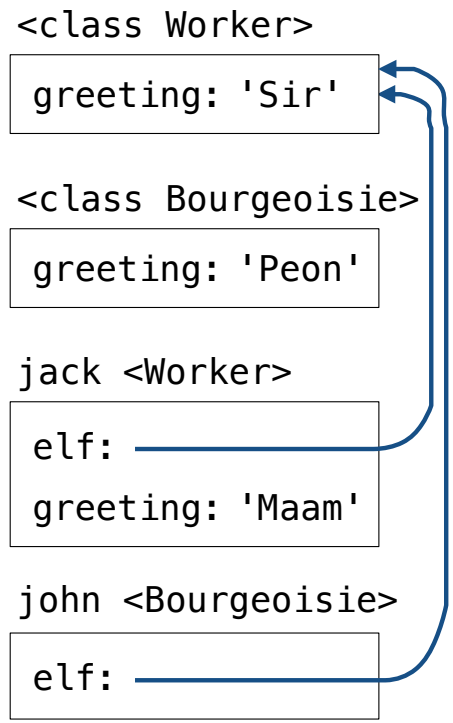

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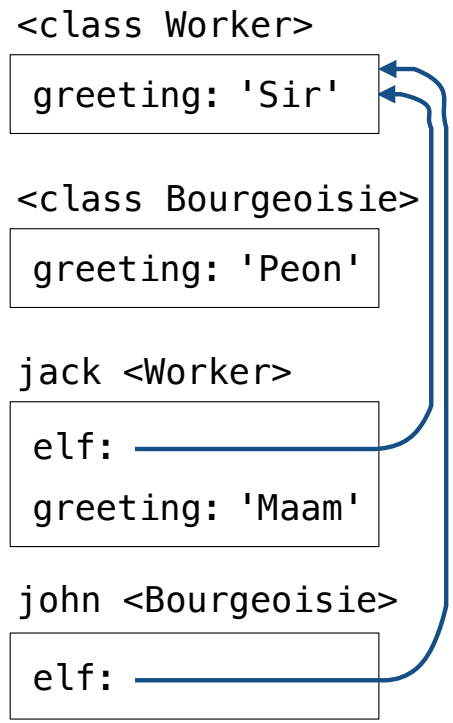

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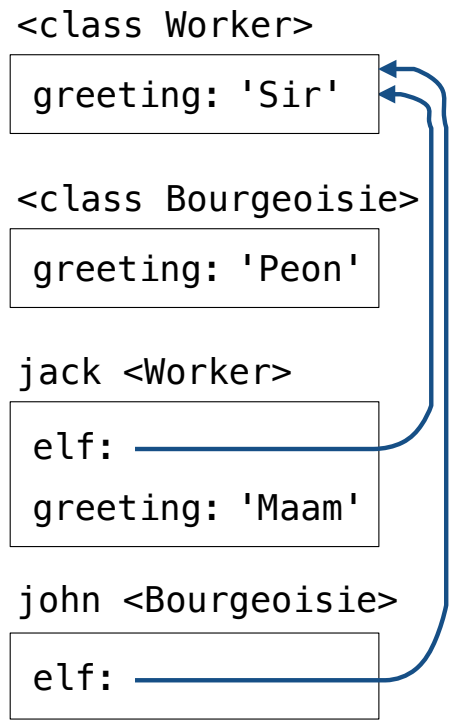

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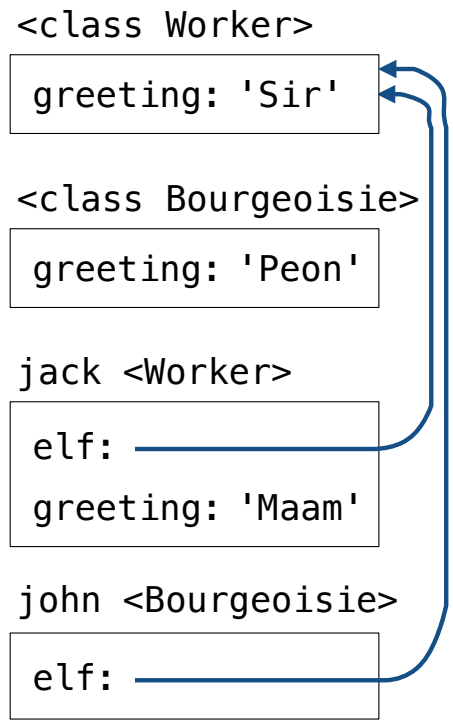

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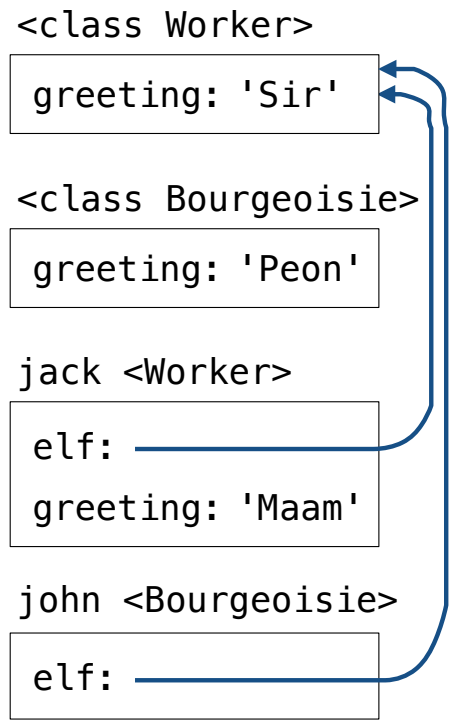

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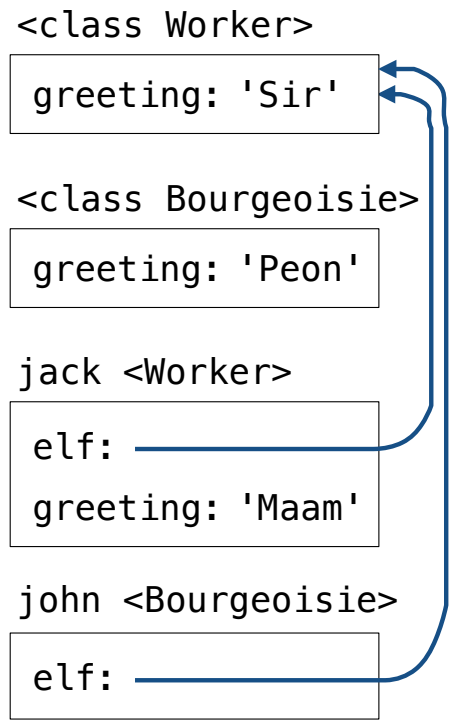

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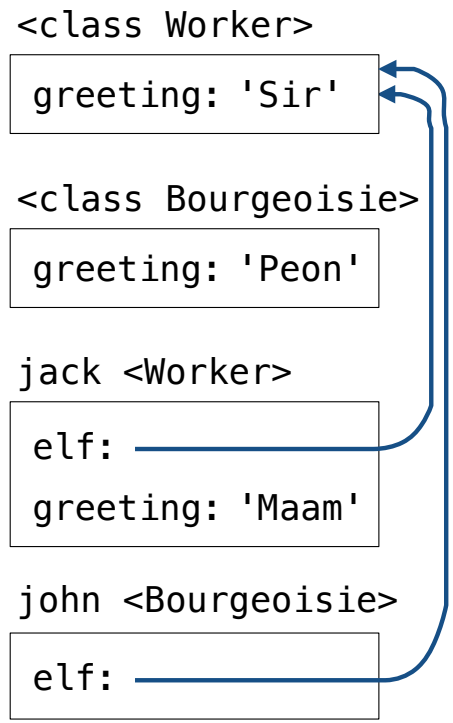

Examples: Iterables & Iterators

Using Built-In Functions & Comprehensions

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What are the indices of all elements in a list s that have the smallest absolute value?

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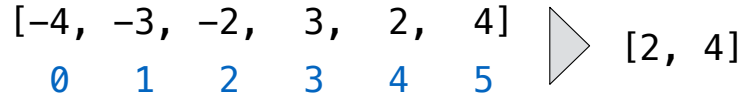

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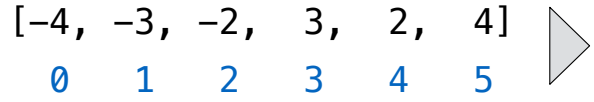

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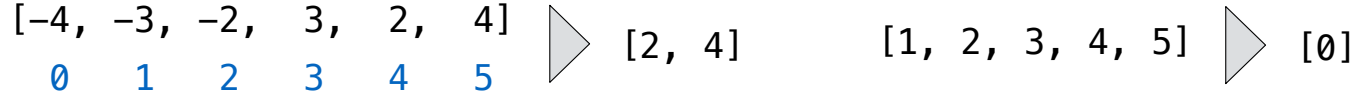

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Create a dictionary mapping each digit d to the lists of elements in s that end with d.

Using Built-In Functions & Comprehensions

What are the indices of all elements in a list s that have the smallest absolute value?

```
[-4, -3, -2,  3,  2,  4]
  0   1   2   3   4   5
```

```
[2, 4]
```

```
[1, 2, 3, 4, 5]
```

```
[0]
```

What's the largest sum of two adjacent elements in a list s? (Assume len(s) > 1)

```
[-4, -3, -2,  3,  2,  4]
```

```
6
```

```
[-4,  3, -2, -3,  2, -4]
```

```
1
```

Create a dictionary mapping each digit d to the lists of elements in s that end with d.

```
[5, 8, 13, 21, 34, 55, 89]
```

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```

```
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```

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```

```
1
```

Create a dictionary mapping each digit d to the lists of elements in s that end with d.

```
[5, 8, 13, 21, 34, 55, 89]
```

```
{1: [21], 3: [13], 4: [34], 5: [5, 55], 8: [8], 9: [89]}
```

Using Built-In Functions & Comprehensions

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Does every element equal some other element in s?

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`[-4, -3, -2,  3,  2,  4]`  `False`

Using Built-In Functions & Comprehensions

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`[-4, -3, -2,  3,  2,  4]`  `6`

`[-4,  3, -2, -3,  2, -4]`  `1`

Create a dictionary mapping each digit d to the lists of elements in s that end with d.

`[5, 8, 13, 21, 34, 55, 89]`  `{1: [21], 3: [13], 4: [34], 5: [5, 55], 8: [8], 9: [89]}`

Does every element equal some other element in s?

`[-4, -3, -2,  3,  2,  4]`  `False`

`[4, 3, 2, 3, 2, 4]`  `True`

Examples: Linked Lists

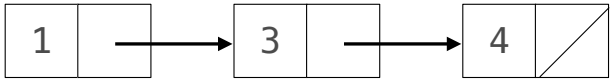
Linked List Exercises

Linked List Exercises

```
Is a linked list s ordered from least to greatest?
```

Linked List Exercises

Is a linked list s ordered from least to greatest?



Linked List Exercises

Is a linked list s ordered from least to greatest?

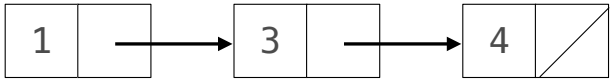
Linked List Exercises

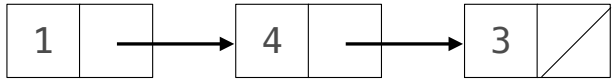
Is a linked list s ordered from least to greatest?

Is a linked list s ordered from least to greatest by absolute value (or a key function)?

Linked List Exercises

Is a linked list s ordered from least to greatest?





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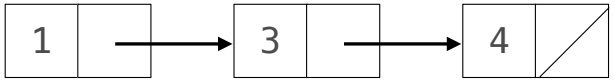

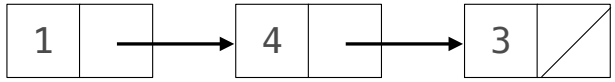

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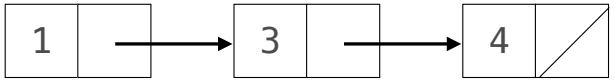

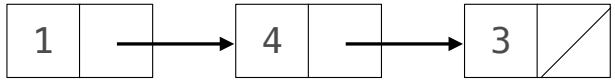

Is a linked list s ordered from least to greatest by absolute value (or a key function)?

Create a sorted Link containing all the elements of both sorted Links s & t.

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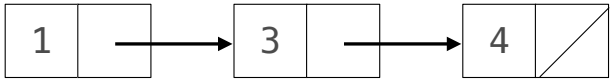

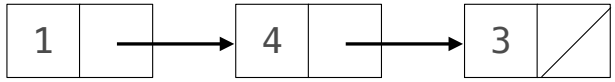

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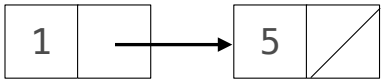

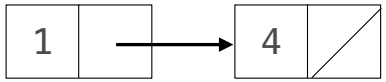

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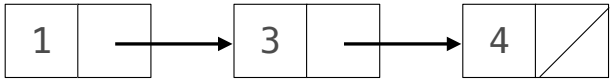

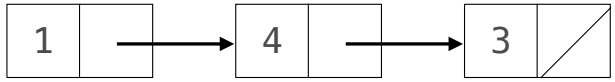

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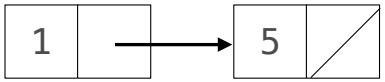

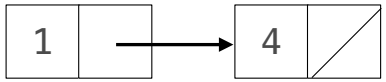

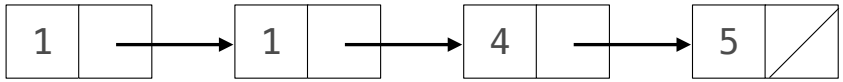

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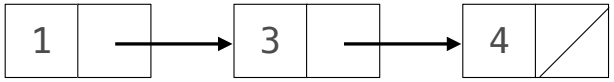

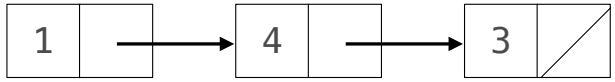

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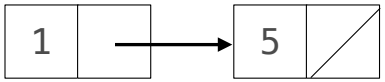

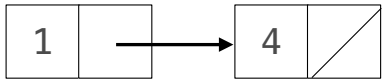

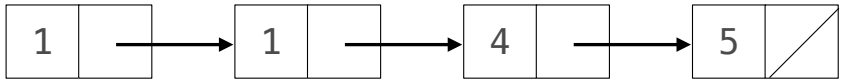

Do the same thing, but never call Link.

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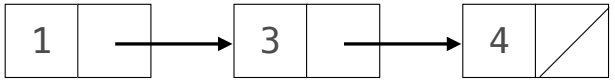

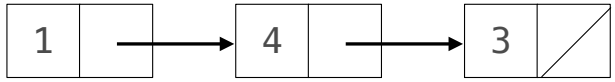

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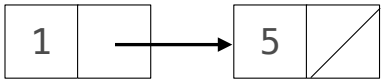

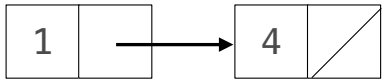

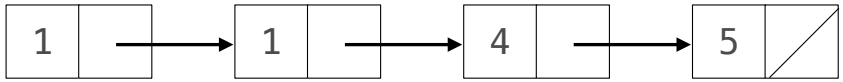

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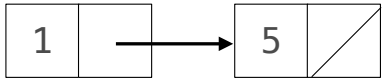

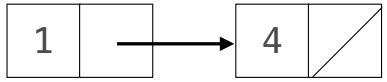

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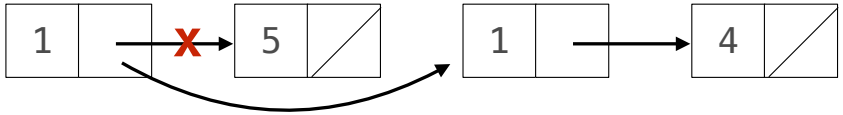

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