Plan for Today

- Images
- Lists
- Do more functions
- Practice problems!
Any Questions?
A Former Exam Problem

- def do_image(filename, n):

```
image
```

```
out
```

```
10 n
```

```
2n
```

```
```
Lists

- Kinda a cheat code
- Consolidate values into one variable. Can even be nested!
- Access values by indices
Looping through a List

- range based loop
- for each loop
Common List functions/operations

- `append()`
- `len()`
- `.index()`
- `.reverse()`
- `.extend()`
- `in`
- `slicing!`
Let's do Lists!

• double_each
  • Given a list, return a new list where every element is doubled. Eg: [1, 2] => [2, 4]
  • Given a list, modify this list so that each element in this list doubled. Eg: [1, 2] becomes [2, 4]
Let's do Lists!

- `shift_elements`
  - Given a `list`, return a new list where the list is shifted by `k`, which is also given.
Let's do Lists!

- `swap_pairs`
  - Given a list, swap all adjacent elements with each other. Modify the original list.
  - `[1, 2, 3, 4] => [2, 1, 4, 3].`
  - `[1, 2, 3] => [2, 1, 3]`
Any Questions?
Practice Problems!

Off to the experimental Server!

Images:
  • bluescreen-stop

Lists:
  • post_donut
  • intersect

Your homework