CS1116/CS5018
Web Development 2

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colour.html: a page with a form

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>Mint tint</title>
  </head>
  <body>
    <form action="colour.py" method="get">
      <p>What's Derek's favourite colour?</p>
      <input type="radio" name="guess" value="red" id="red" checked />
      <label for="red">Red</label>
      <input type="radio" name="guess" value="green" id="green" />
      <label for="green">Green</label>
      <input type="radio" name="guess" value="blue" id="blue" />
      <label for="blue">Blue</label>
      <input type="submit" value="Hit me!" />
    </form>
  </body>
</html>
```

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colour.py: an incomplete program

```python
#!/usr/local/bin/python3

from cgitb import enable
enable()

from cgi import FieldStorage

print('Content-Type: text/html')
print()

dereks_mint_tint = 'green';

form_data = FieldStorage()

print("""
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>Mint tint</title>
  </head>
  <body>
    <p>
      You are %s. Derek's favourite colour is %s.
    </p>
  </body>
</html>""" % (outcome, dereks_mint_tint))
```

toppings.html: a page with a form

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <title>Top toppings</title>
</head>
<body>
<form action="toppings.py" method="get">
<p>What are Derek's favourite pizza toppings?</p>
<input type="checkbox" name="guesses" value="anchovies" id="anchovies" />
<label for="anchovies">Anchovies</label>
<input type="checkbox" name="guesses" value="chocolate" id="chocolate" />
<label for="chocolate">Chocolate</label>
<input type="checkbox" name="guesses" value="nails" id="nails" />
<label for="nails">Finger nails</label>
<input type="checkbox" name="guesses" value="olives" id="olives" />
<label for="olives">Olives</label>
<input type="checkbox" name="guesses" value="pepperoni" id="pepperoni" />
<label for="pepperoni">Pepperoni</label>
<input type="submit" value="Dish it up!" />
</form>
</body>
</html>
```

toppings.py: an incomplete program

```python
#!/usr/local/bin/python3

from cgitb import enable
enable()

from cgi import FieldStorage

print('Content-Type: text/html')
print()

dereks_top_toppings = ['anchovies', 'chocolate', 'pepperoni']

form_data = FieldStorage()

print("""
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="utf-8" />
        <title>Top toppings</title>
    </head>
    <body>
        <p>
        %s
        </p>
    </body>
</html>""" % (outcome))
```

Summary

- Where you are expecting a name to be paired with a single value,
  - e.g. <input type="text">, <input type="radio">, …
  - then use getfirst
  - Q: Can the user send us no data? Can s/he supply a value other than red, green or blue? Can s/he supply more than one value? How? What should we do?

Summary

- Where you are expecting a name to be paired with zero, one or more values,

  - e.g. `<input type="checkbox">`

  - then use `getlist`

  - Q: What happens if the user sends us no data? What if s/he supplies just one value? Do we need to do anything special?

  - Q: What happens if the user supplies values other than anchovies, chocolate, nails, olives and pepperoni? How can s/he do that? What should we do?