

httpclient1.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # httpclient1.py
5: # Author: Bob Dondero
6: #-----
7:
8: import sys
9: import socket
10:
11: def main():
12:
13:     if len(sys.argv) != 4:
14:         print('Usage: python %s host port file' % sys.argv[0])
15:         sys.exit(1)
16:
17:     try:
18:         host = sys.argv[1]
19:         port = int(sys.argv[2])
20:         file_name = sys.argv[3]
21:
22:         with socket.socket() as sock:
23:             sock.connect((host, port))
24:
25:             with sock.makefile(
26:                 mode='w', encoding='iso-8859-1') as out_flo:
27:
28:                 out_flo.write('GET ' + file_name + ' HTTP/1.1\r\n')
29:                 out_flo.write('Host: ' + host + '\r\n')
30:                 out_flo.write('\r\n')
31:                 #out_flo.flush()
32:
33:             with sock.makefile(
34:                 mode='r', encoding='iso-8859-1') as in_flo:
35:
36:                 # Read the response headers from the socket, and write
37:                 # them to stdout.
38:                 for line in in_flo:
39:                     print(line, end='')
40:                     if line == '\n':
41:                         break
42:
43:                 # A smarter program would examine the Content-type
44:                 # header to determine how to interpret the response
45:                 # content. Here, assume that the content consists of
46:                 # iso-8859-1 characters, and write them to stdout.
47:                 for line in in_flo:
48:                     print(line, end='')
49:
50:     except Exception as ex:
51:         print(ex, file=sys.stderr)
52:         sys.exit(1)
53:
54: if __name__ == '__main__':
55:     main()

```

httpclient2.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # httpclient2.py
5: # Author: Bob Dondero
6: #-----
7:
8: import sys
9: import urllib.request
10:
11: def main():
12:
13:     if len(sys.argv) != 2:
14:         print('Usage: python %s url' % sys.argv[0])
15:         sys.exit(1)
16:
17:     try:
18:         url = sys.argv[1]
19:
20:         # Read the response headers from a socket.
21:         with urllib.request.urlopen(url) as in_flo:
22:
23:             # Write the response headers to stdout.
24:             print(in_flo.info(), end='')
25:
26:             # Read the response content from the socket.
27:             file_bytes = in_flo.read()
28:
29:             # A smarter program would examine the Content-type
30:             # header to determine how to interpret the response
31:             # content. Here, assume that the content consists of
32:             # iso-8859-1 characters, and write them to stdout.
33:             file_str = file_bytes.decode('iso-8859-1')
34:             print(file_str, end='')
35:
36:     except Exception as ex:
37:         print(ex, file=sys.stderr)
38:         sys.exit(1)
39:
40: if __name__ == '__main__':
41:     main()

```

fund.html (Page 1 of 2)

```

1: <!DOCTYPE html>
2:
3: <!-- ===== -->
4: <!-- fundamentals.html -->
5: <!-- Author: Bob Dondero -->
6: <!-- ===== -->
7:
8: <html>
9:   <head>
10:     <title>Show HTML Fundamentals</title>
11:   </head>
12:
13:   <body>
14:     <!-- ===== -->
15:     <h1>Heading 1</h1>
16:     <h2>Heading 2</h2>
17:     <h3>Heading 3</h3>
18:     <h4>Heading 4</h4>
19:     <h5>Heading 5</h5>
20:     <h6>Heading 6</h6>
21:
22:     <!-- ===== -->
23:     <hr>
24:     <h1>Non-Rendered Elements</h1>
25:
26:     <div>Division1</div>
27:     <div>Division2</div>
28:     <span>Span1</span>
29:     <span>Span2</span>
30:
31:     <!-- ===== -->
32:     <hr>
33:     <h1>Paragraphs</h1>
34:
35:     <p>Paragraph</p>
36:     <p align="center">Centered paragraph</p>
37:
38:     <br>
39:
40:     <!-- ===== -->
41:     <hr>
42:     <h1>Physical Character Formatting Elements</h1>
43:
44:     <b>boldface</b><br>
45:     <i>italics</i><br>
46:     <u>underline</u><br>
47:     <strike>strikethrough</strike><br>
48:     <big>big font</big><br>
49:     <small>small font</small><br>
50:     normal <sup>superscript</sup> <sub>subscript</sub><br>
51:     <tt>teletype</tt><br>
52:
53:     <!-- ===== -->
54:     <hr>
55:     <h1>Logical Character Formatting Elements</h1>
56:
57:     <strong>strong</strong><br>
58:     <em>emphasize</em><br>
59:     <cite>citation</cite><br>
60:     <code>code listing</code><br>
61:     <samp>sample output from code</samp><br>
62:     <pre>pre formatted</pre>
63:
64:     <!-- ===== -->
65:     <hr>

```

fund.html (Page 2 of 2)

```

66:     <h1>Character Entities</h1>
67:
68:     &lt;<br>
69:     &gt;<br>
70:     &quot;<br>
71:     &amp;<br>
72:     &nbsp;<br>
73:     &cent;<br>
74:     &pound;<br>
75:     &copy;<br>
76:     &Agrave;<br>
77:
78:     <!-- See https://dev.w3.org/html5/html-author/charref for
79:     the full set. -->
80:
81:     <!-- ===== -->
82:     <hr>
83:     <h1>Lists</h1>
84:
85:     <ul>
86:       <li>Unordered list item 1.</li>
87:       <li>Unordered list item 2.</li>
88:     </ul>
89:
90:     <ol>
91:       <li>Ordered list item 1.</li>
92:       <li>Ordered list item 2.</li>
93:     </ol>
94:
95:     <!-- ===== -->
96:     <hr>
97:     <h1>Tables</h1>
98:     <table border="5" cellpadding="5" cellspacing="5">
99:       <thead>
100:         <tr>
101:           <td>header col 1</td>
102:           <td>header col 2</td>
103:           <td>header col 3</td>
104:         </tr>
105:       </thead>
106:       <tbody>
107:         <tr>
108:           <td>row 1 col 1</td>
109:           <td>row 1 col 2</td>
110:           <td>row 1 col 3</td>
111:         </tr>
112:         <tr>
113:           <td>row 2 col 1</td>
114:           <td>row 2 col 2</td>
115:           <td>row 2 col 3</td>
116:         </tr>
117:         <tr>
118:           <td>row 3 col 1</td>
119:           <td colspan="2">row 3 cols 2 and 3</td>
120:         </tr>
121:       </tbody>
122:       <tfoot>
123:         <tr>
124:           <td colspan="3">footer cols 1, 2, and 3</td>
125:         </tr>
126:       </tfoot>
127:     </table>
128:   </body>
129: </html>

```

links.html (Page 1 of 1)

```

1: <!DOCTYPE html>
2:
3: <!-- ===== -->
4: <!-- links.html -->
5: <!-- Author: Bob Dondero -->
6: <!-- ===== -->
7:
8: <html>
9:   <head>
10:    <title>Show HTML Page Links</title>
11:   </head>
12:
13:   <body>
14:
15:     <hr>
16:     <h1>These are links:</h1>
17:     <hr>
18:
19:     <a href="/yogi.txt">Link to yogi.txt</a><br>
20:
21:     <a href="/fund.html">Link to fund.html</a><br>
22:
23:   </body>
24: </html>

```

forms.html (Page 1 of 1)

```

1: <!DOCTYPE html>
2:
3: <!-- ===== -->
4: <!-- forms.html -->
5: <!-- Author: Bob Dondero -->
6: <!-- ===== -->
7:
8: <html>
9:   <head>
10:    <title>Show HTML Forms</title>
11:   </head>
12:
13:   <body>
14:
15:     <hr>
16:     <h1>These are forms:</h1>
17:     <hr>
18:
19:     <form action="/yogi.txt">
20:       <input type="submit" value="Form to yogi.txt">
21:     </form>
22:
23:     <form action="/fund.html">
24:       <input type="submit" value="Form to fund.html">
25:     </form>
26:
27:   </body>
28: </html>

```