

httpclient1.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # httpclient1.py
5: # Author: Bob Dondero
6: #-----
7:
8: from sys import exit, argv, stderr
9: from socket import socket
10:
11: def main():
12:
13:     if len(argv) != 4:
14:         print('Usage: python %s host port file' % argv[0])
15:         exit(1)
16:
17:     try:
18:         host = argv[1]
19:         port = int(argv[2])
20:         file_name = argv[3]
21:
22:         with socket() as sock:
23:             sock.connect((host, port))
24:
25:             out_flo = sock.makefile(mode='w', encoding='iso-8859-1')
26:             out_flo.write('GET ' + file_name + ' HTTP/1.1\r\n')
27:             out_flo.write('Host: ' + host + '\r\n')
28:             out_flo.write('\r\n')
29:             out_flo.flush()
30:
31:             # Read the headers from the socket, and write them
32:             # to stdout.
33:             in_flo = sock.makefile(mode='r', encoding='iso-8859-1')
34:             for line in in_flo:
35:                 print(line, end='')
36:                 if line == '\n':
37:                     break
38:             in_flo.close()
39:
40:             # Read the file's content from the socket.
41:             in_flo = sock.makefile(mode='rb')
42:             file_bytes = in_flo.read()
43:             in_flo.close()
44:
45:             # A smarter program would examine the headers to
46:             # determine how to interpret the file content. Here,
47:             # assume that the file contains UTF-8 characters.
48:             try:
49:                 file_str = file_bytes.decode('utf-8')
50:                 print(file_str, end='')
51:             except Exception:
52:                 print(file_bytes)
53:
54:     except Exception as ex:
55:         print(ex, file=stderr)
56:         exit(1)
57:
58: if __name__ == '__main__':
59:     main()

```

httpclient2.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # httpclient2.py
5: # Author: Bob Dondero
6: #-----
7:
8: from sys import exit, argv, stderr
9: from urllib.request import urlopen
10:
11: def main():
12:
13:     if len(argv) != 4:
14:         print('Usage: python %s host port file' % argv[0])
15:         exit(1)
16:
17:     try:
18:         host = argv[1]
19:         port = argv[2]
20:         file_name = argv[3]
21:
22:         url = 'http://' + host + ':' + port + '/' + file_name
23:
24:         # Read the headers from a socket, and write them to stdout.
25:         in_flo = urlopen(url)
26:         print(in_flo.info(), end='')
27:
28:         # Read the file's content from the socket.
29:         file_bytes = in_flo.read()
30:         in_flo.close()
31:
32:         # A smarter program would examine the headers to
33:         # determine how to interpret the file content. Here,
34:         # assume that the file contains UTF-8 characters.
35:         try:
36:             file_str = file_bytes.decode('utf-8')
37:             print(file_str, end='')
38:         except Exception:
39:             print(file_bytes)
40:
41:     except Exception as ex:
42:         print(ex, file=stderr)
43:         exit(1)
44:
45: if __name__ == '__main__':
46:     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:   <body>
13:
14:     <!-- ===== -->
15:
16:     <h1>Heading 1</h1>
17:     <h2>Heading 2</h2>
18:     <h3>Heading 3</h3>
19:     <h4>Heading 4</h4>
20:     <h5>Heading 5</h5>
21:     <h6>Heading 6</h6>
22:
23:     <!-- ===== -->
24:
25:     <hr>
26:     <h1>Containers</h1>
27:     <div>Division1</div>
28:     <div>Division2</div>
29:     <span>Span1</span>
30:     <span>Span2</span>
31:
32:     <!-- ===== -->
33:
34:     <hr>
35:     <h1>Paragraphs</h1>
36:
37:     <p>Paragraph</p>
38:     <p align="center">Centered paragraph</p>
39:
40:     <br>
41:
42:     <!-- ===== -->
43:
44:     <hr>
45:     <h1>Physical Character Formatting Tags</h1>
46:
47:     <b>boldface</b><br>
48:     <i>italics</i><br>
49:     <u>underline</u><br>
50:     <strike>strikethrough</strike><br>
51:     <big>big font</big><br>
52:     <small>small font</small><br>
53:     normal <sup>superscript</sup> <sub>subscript</sub><br>
54:     <tt>teletype</tt><br>
55:
56:     <!-- ===== -->
57:
58:     <hr>
59:     <h1>Logical Character Formatting Tags</h1>
60:
61:     <strong>strong</strong><br>
62:     <em>emphasize</em><br>
63:     <cite>citation</cite><br>
64:     <code>code listing</code><br>
65:     <samp>sample output from code</samp><br>

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fund.html (Page 2 of 2)

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66:     <pre>pre    formatted</pre>
67:
68:     <!-- ===== -->
69:
70:     <hr>
71:     <h1>Character Entities</h1>
72:
73:     &lt;<br>
74:     &gt;<br>
75:     &quot;<br>
76:     &amp;<br>
77:     &nbsp;<br>
78:     &cent;<br>
79:     &pound;<br>
80:     &copy;<br>
81:     &Agrave;<br>
82:
83:     <p>See https://dev.w3.org/html5/html-author/charref for
84:     the full set.</p>
85:
86:     <!-- ===== -->
87:
88:     <hr>
89:     <h1>Lists</h1>
90:
91:     <ul>
92:       <li>Unordered list item 1.</li>
93:       <li>Unordered list item 2.</li>
94:     </ul>
95:
96:     <ol>
97:       <li>Ordered list item 1.</li>
98:       <li>Ordered list item 2.</li>
99:     </ol>
100:
101:     <!-- ===== -->
102:
103:     <hr>
104:     <h1>Tables</h1>
105:     <table border="5" cellpadding="5" cellspacing="5">
106:       <tr>
107:         <th>heading col 1</th>
108:         <th>heading col 2</th>
109:         <th>heading col 3</th>
110:       </tr>
111:       <tr>
112:         <td>row 1 col 1</td>
113:         <td>row 1 col 2</td>
114:         <td>row 1 col 3</td>
115:       </tr>
116:       <tr>
117:         <td>row 2 col 1</td>
118:         <td>row 2 col 2</td>
119:         <td>row 2 col 3</td>
120:       </tr>
121:       <tr>
122:         <td>row 3 col 1</td>
123:         <td colspan="2">row 3 cols 2 and 3</td>
124:       </tr>
125:     </table>
126:
127:   </body>
128: </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:   <body>
13:
14:     <hr>
15:     <h1>These are links:</h1>
16:     <hr>
17:
18:     <a href="http://192.168.1.8:5555/yogi.txt">
19:       Link to yogi.txt</a><br>
20:
21:     <a href="yogi.txt">
22:       Link to yogi.txt</a><br>
23:
24:     <a href="http://192.168.1.8:5555/fund.html">
25:       Link to fund.html</a><br>
26:
27:     <a href="fund.html">
28:       Link to fund.html</a><br>
29:
30:   </body>
31: </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:   <body>
13:
14:     <hr>
15:     <h1>These are forms:</h1>
16:     <hr>
17:
18:     <form
19:       action="http://192.168.1.8:5555/yogi.txt">
20:       <input type="submit" value="Form to yogi.txt">
21:     </form>
22:
23:     <form action="yogi.txt">
24:       <input type="submit" value="Form to yogi.txt">
25:     </form>
26:
27:     <form
28:       action="http://192.168.1.8:5555/fund.html">
29:       <input type="submit" value="Form to fund.html">
30:     </form>
31:
32:     <form action="fund.html">
33:       <input type="submit" value="Form to fund.html">
34:     </form>
35:
36:   </body>
37: </html>

```