

## urlencode.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # urlencode.py
5: # Author: Bob Dondero
6: #-----
7:
8: from sys import exit, argv
9: from urllib.parse import quote_plus, unquote_plus
10:
11: #-----
12:
13: def main():
14:
15:     if len(argv) != 2:
16:         print('Usage: python %s unencodedstr' % argv[0])
17:         exit(1)
18:
19:     original_str = argv[1]
20:
21:     encoded_str = quote_plus(original_str)
22:     decoded_str = unquote_plus(encoded_str)
23:
24:     print('Original string: ' + original_str)
25:     print('Encoded string: ' + encoded_str)
26:     print('Decoded string: ' + decoded_str)
27:
28: #-----
29:
30: if __name__ == '__main__':
31:     main()

```

## HelloPythonGet/runserver.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # runserver.py
5: # Author: Bob Dondero
6: #-----
7:
8: from sys import stderr, argv, exit
9: from os import system
10:
11: def main():
12:
13:     if len(argv) != 2:
14:         print('Usage: ' + argv[0] + ' port', file=stderr)
15:         exit(1)
16:
17:     try:
18:         port = int(argv[1])
19:     except Exception:
20:         print('Port must be an integer.', file=stderr)
21:         exit(1)
22:
23:     system('python simplehttpserver.py --cgi ' + str(port))
24:
25: if __name__ == '__main__':
26:     main()

```

## HelloPythonGet/index.html (Page 1 of 1)

```

1: <!DOCTYPE html>
2:
3: <!-- ===== -->
4: <!-- index.html -->
5: <!-- Author: Bob Dondero -->
6: <!-- ===== -->
7:
8: <html>
9:
10:   <body>
11:
12:     <form action="hello.py" method="get">
13:       Type your name:<br>
14:       <input type="text" name="person" value="Enter your handle"><br>
15:       <input type="submit">
16:     </form>
17:
18:   </body>
19:
20: </html>

```

## HelloPythonGet/hello.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # hello.py
5: # Author: Bob Dondero
6: #-----
7:
8: from os import environ
9: from urllib.parse import unquote_plus
10:
11: #-----
12:
13: def get_value_help(name_value_pair_str, sought_name):
14:     if '=' not in name_value_pair_str:
15:         return None
16:     name, value = name_value_pair_str.split('=')
17:     name = unquote_plus(name)
18:     if name != sought_name:
19:         return None
20:     value = unquote_plus(value)
21:     if value == '':
22:         return None
23:     return value
24:
25: #-----
26:
27: def get_value(name_value_pairs_str, sought_name):
28:     name_value_pairs = name_value_pairs_str.split('&')
29:     for name_value_pair_str in name_value_pairs:
30:         value = get_value_help(name_value_pair_str, sought_name)
31:         if value is not None:
32:             return value
33:     return None
34:
35: #-----
36:
37: def main():
38:
39:     # Write the response headers.
40:     print('Content-type: Text/html')
41:     print()
42:
43:     # Write the beginning of the response body.
44:     print('<!DOCTYPE html>')
45:     print('<html>')
46:     print('<body>')
47:
48:     # Fetch data from the QUERY_STRING environment variable.
49:     # The value of the QUERY_STRING environment variable should
50:     # contain a name=value pair whose name is 'person'.
51:     # Write a message containing the value.
52:     name_value_pairs_str = environ['QUERY_STRING']
53:     value = get_value(name_value_pairs_str, 'person')
54:     if value is not None:
55:         print('<p>hello, ' + value + '</p>')
56:     else:
57:         print('<p>hello, unknown person</p>')
58:
59:     # Write the end of the response body.
60:     print('</body>')
61:     print('</html>')
62:
63: if __name__ == '__main__':
64:     main()

```

## HelloPythonPost/index.html (Page 1 of 1)

```

1: <!DOCTYPE html>
2:
3: <!-- ===== -->
4: <!-- index.html -->
5: <!-- Author: Bob Dondero -->
6: <!-- ===== -->
7:
8: <html>
9:
10:   <body>
11:     <form action="hello.py" method="post">
12:       Type your name:<br>
13:       <input type="text" name="person" value="Enter your handle"><br>
14:       <input type="submit">
15:     </form>
16:   </body>
17:
18: </html>

```

## HelloPythonPost/hello.py (Page 1 of 1)

```

1: #!/usr/bin/env python
2:
3: #-----
4: # hello.py
5: # Author: Bob Dondero
6: #-----
7:
8: from sys import stdin
9: from urllib.parse import unquote_plus
10:
11: #-----
12:
13: def get_value_help(name_value_pair_str, sought_name):
14:     if '=' not in name_value_pair_str:
15:         return None
16:     name, value = name_value_pair_str.split('=')
17:     name = unquote_plus(name)
18:     if name != sought_name:
19:         return None
20:     value = unquote_plus(value)
21:     if value == '':
22:         return None
23:     return value
24:
25: #-----
26:
27: def get_value(name_value_pairs_str, sought_name):
28:     name_value_pairs = name_value_pairs_str.split('&')
29:     for name_value_pair_str in name_value_pairs:
30:         value = get_value_help(name_value_pair_str, sought_name)
31:         if value is not None:
32:             return value
33:     return None
34:
35: #-----
36:
37: def main():
38:
39:     # Write the response headers.
40:     print('Content-type: Text/html')
41:     print()
42:
43:     # Write the beginning of the response body.
44:     print('<!DOCTYPE html>')
45:     print('<html>')
46:     print('<body>')
47:
48:     # Read data from stdin. Stdin should contain a name=value pair
49:     # whose name is 'person'. Write a message containing the value.
50:     name_value_pairs_str = stdin.readline()
51:     value = get_value(name_value_pairs_str, 'person')
52:     if value is not None:
53:         print('<p>hello, ' + value + '</p>')
54:     else:
55:         print('<p>hello, unknown person</p>')
56:
57:     # Write the end of the response body.
58:     print('</body>')
59:     print('</html>')
60:
61: if __name__ == '__main__':
62:     main()

```