

#Barebones App

```
from flask import Flask

app = Flask(__name__)

@app.route('/hello')
def hello():
    return 'Hello, World!'

if __name__ == '__main__':
    app.run(debug=True)
```

#Routing

```
@app.route('/hello/<string:name>') # example.com/hello/Anthony
def hello(name):
    return 'Hello ' + name + '!' # returns hello Anthony!
```

#Allowed Request Methods

```
@app.route('/test') #default. only allows GET requests
@app.route('/test', methods=['GET', 'POST']) #allows only GET and POST.
@app.route('/test', methods=['PUT']) #allows only PUT
```

#Configuration

```
#direct access to config
app.config['CONFIG_NAME'] = 'config value'
```

```
#import from an exported environment variable with a path to a config file
app.config.from_envvar('ENV_VAR_NAME')
```

#Templates

```
from flask import render_template

@app.route('/')
def index():
    return render_template('template_file.html', var1=value1, ...)
```

#JSON Responses

```
import jsonify

@app.route('/returnstuff')
def returnstuff():
    num_list = [1,2,3,4,5]
    num_dict = {'numbers' : num_list, 'name' : 'Numbers'}

    #returns {'output' : {'numbers' : [1,2,3,4,5], 'name' : 'Numbers'}}
    return jsonify({'output' : num_dict})
```

#Access Request Data

```
request.args['name'] #query string arguments
request.form['name'] #form data
request.method #request type
request.cookies.get('cookie_name') #cookies
request.files['name'] #files
```

#Redirect

```
from flask import url_for, redirect
```

```
@app.route('/home')
def home():
    return render_template('home.html')
```

```
@app.route('/redirect')
def redirect_example():
    return redirect(url_for('index')) #sends user to /home
```

#Abort

```
from flask import abort()
```

```
@app.route('/')
def index():
    abort(404) #returns 404 error
    render_template('index.html') #this never gets executed
```

#Set Cookie

```
from flask import make_response
```

```
@app.route('/')
def index():
    resp = make_response(render_template('index.html'))
    resp.set_cookie('cookie_name', 'cookie_value')
    return resp
```

#Session Handling

```
import session
```

```
app.config['SECRET_KEY'] = 'any random string' #must be set to use sessions
```

```
#set session
@app.route('/login_success')
def login_success():
```

```
    session['key_name'] = 'key_value' #stores a secure cookie in browser

    return redirect(url_for('index'))
```

```
#read session
@app.route('/')
def index():
```

```
    if 'key_name' in session: #session exists and has key
        session_var = session['key_value']
    else: #session does not exist
```