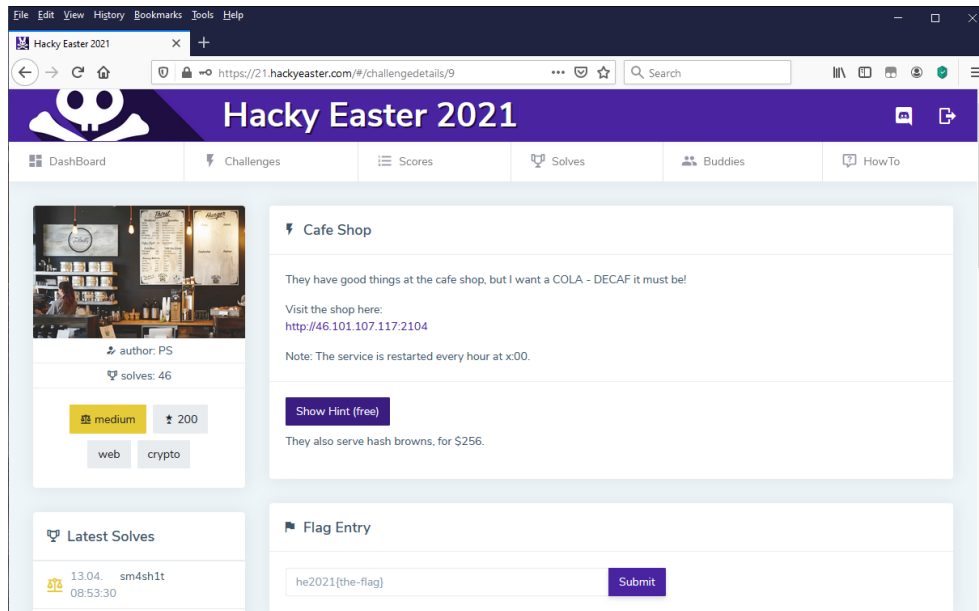


# Hacky Easter 2021

## Cafe Shop

1. Click the **Cafe Shop** image:



2. Open a Windows Command Prompt.
3. Execute the following command, from the Windows Command Prompt, to download the contents of the **http://46.101.107.117:2104** web site:

**wget -q http://46.101.107.117:2104**

```
--2021-05-10 10:16:21-- http://46.101.107.117:2104/
Connecting to 46.101.107.117:2104... connected.
HTTP request sent, awaiting response... 200
Length: 1201 (1.2K) [text/html]
Saving to: `index.html.1'
```

```
100%[=====] 1,201      --.-K/s   in 0s
```

```
2021-05-10 10:16:21 (36.6 MB/s) - `index.html' saved [1201/1201]
```

## Hacky Easter 2021

- Execute the following command, from the Windows Command Prompt, to display the contents of the **index.html** file:

### type index.html

```
<!DOCTYPE HTML>
<html xmlns:th="http://www.thymeleaf.org">
<head>
  <title>Cafe Shop</title>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
  <link rel="stylesheet" href="bootstrap.css">
  <link rel="stylesheet" href="main.css">
</head>
<body>
  <div id="f">
    <div class="container">
      <div class="row">
        <h1 style="color: white;">Welcome to my Cafe!</h1>
        <br/>
        <p></p>
        <p>Choose what you want and enjoy!</p>
        <form action="order" method="post">
          <p>
            <select name="id" class="input-lg">
              <option value="11865457 Vanilla Cafe">Vanilla CAFE</option>
              <option value="42640575 Cherry Cola">Cherry COLA</option>
              <option value="80427209 Beef Jerky">BEEF Jerky</option>
            </select>
            <br/>
          </p>
          <p>
            <button type="submit" class="btn btn-success input-lg" style="font-size: 18px;">Order Item!</button>
          </p>
        </form>
      </div>
    </div>
  </div>
</body>
</html>
```

- Create a Python script, **sha256\_hashes.py**, to calculate the SHA256 hashes of the option values:

```
#!/usr/bin/python3
```

```
import hashlib
```

```
numbers = b'11865457 Vanilla Cafe', b'42640575 Cherry Cola', b'80427209 Beef Jerky'
```

```
for i in range(len(numbers)):
    m = hashlib.sha256()
    m.update(numbers[i])
    print(m.hexdigest())
```

- Execute the following command, from the Windows Command Prompt, to execute the **sha256\_hashes.py** Python script:

```
python sha256_hashes.py
```

```
f15bffb719f26892f17eea53dc7e3459cafe021bc0db2dce72429667d7aeee96
36bc94f7d7c3398319f2c01a9a9c583aed66d3a5e325aafa0652ceb2bdc271cf
ed734b4fc622d543774121dcfb573cf53d7ddef85ebebeef9fd7cbd8bf4363c9
```

## Hacky Easter 2021

7. Create a Python script, `find_value.py`, to find the required option value for **Cola Decaf**:

```
#!/usr/bin/python3

import hashlib

i = 1
found = False

while i < 999999999 and found == False:
    value = f"{int(i):08}" + ' Cola Decaf'

    m = hashlib.sha256()
    m.update(value.encode())
    hash = m.hexdigest()

    if 'c01a' in hash and 'decaf' in hash:
        print(value)
        found = True

    else:
        i += 1
```

8. Execute the following command, from the Windows Command Prompt, to execute the `find_value.py` Python script:

```
python find_value.py
```

```
19614073 Cola Decaf
```

9. Execute the following command, from the Windows Command Prompt, to POST the order id value **19614073 Cola Decaf** to the order web page:

```
curl -s http://46.101.107.117:2104/order -d "id=19614073 Cola Decaf"
```

```
<!DOCTYPE HTML>
<html>
<head>
    <title>Cafe Shop</title>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
    <link rel="stylesheet" href="bootstrap.css">
    <link rel="stylesheet" href="main.css">
</head>
<body>
    <div id="f">
        <div class="container">
            <div class="row">
                <p></p>
                <p>Here's your order. Enjoy!!</p>
                <p></p>
            </div>
        </div>
    </div>
</body>
</html>
```

## Hacky Easter 2021

10. Execute the following command, from the Windows Command Prompt, to download the **7ef384aa6ec128ef.png** file, from the **http://46.101.107.117:2104/** web site:

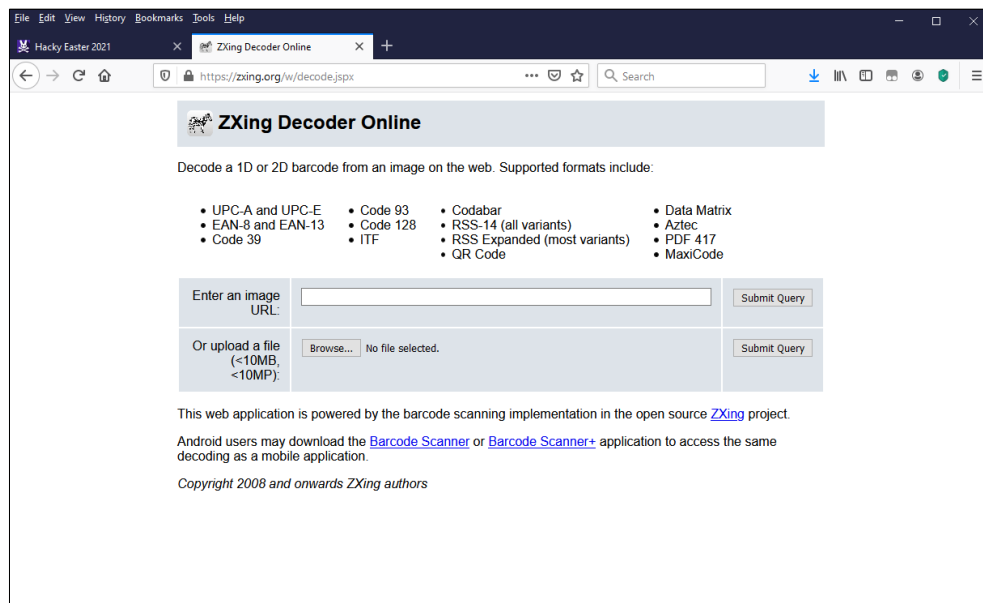
**wget http://46.101.107.117:2104/7ef384aa6ec128ef.png**

```
--2021-05-14 10:59:11-- http://46.101.107.117:2104/7ef384aa6ec128ef.png
Connecting to 46.101.107.117:2104... connected.
HTTP request sent, awaiting response... 200
Length: 20600 (20K) [image/png]
Saving to: `7ef384aa6ec128ef.png'
```

```
100%[=====] 20,600
--.-K/s in 0.02s
```

```
2021-05-14 10:59:11 (910 KB/s) - `7ef384aa6ec128ef.png' saved [20600/20600]
```

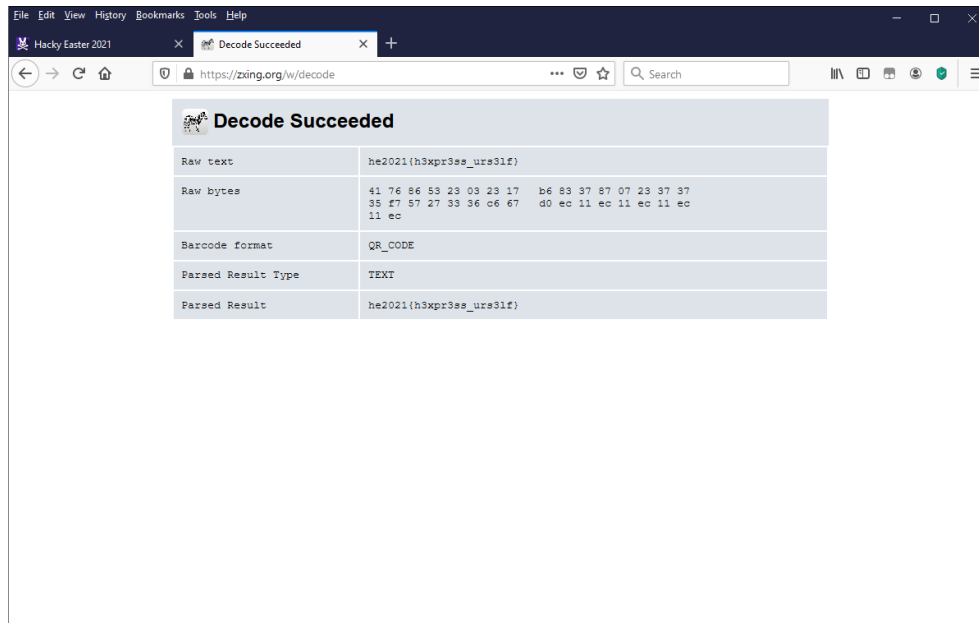
11. Click the **Second** tab.
12. Navigate to **https://zxing.org**:



13. Click the **Browse...** button and then open the **7ef384aa6ec128ef.png** file.

# Hacky Easter 2021

14. Click the **Submit Query** button:



15. Close the **Second** tab.
16. Close the Windows Command Prompt.

Flag: **he2021{h3xpr3ss\_urs3lf}**