### **Source Code**

Most websites nowadays utilize JavaScript to perform their functions. While HTML is used to determine the website's main fields and parameters, and CSS is used to determine its design, JavaScript is used to perform any functions necessary to run the website. This happens in the background, and we only see the pretty front-end of the website and interact with it.

Even though all of this source code is available at the client-side, it is rendered by our browsers, so we do not often pay attention to the HTML source code. However, if we wanted to understand a certain page's client-side functionalities, we usually start by taking a look at the page's source code. This section will show how we can uncover the source code that contains all of this and understand its general usage.

#### **HTML**

We will start by starting the exercise below, open Firefox in our PwnBox, and visit the url shown in the question:



http://SERVER\_IP:PORT



# Secret Serial Generator

This page generates secret serials!

As we can see, the website says Secret Serial Generator, without having any input fields or showing any clear functionality. So, our next step is to peak at its source code. We can do that by pressing [CTRL + U], which should open the source view of the website:

```
1 </html>
   2 <!DOCTYPE html>
   4 <head>
         <title>Secret Serial Generator</title>
   6
         <style>
            html {
                margin: 0;
                padding: 0;
  10
  11
                border: 0;
  13
  14
            html {
  15
                width: 100%;
  16
                height: 100%;
  17
            }
  18
```

As we can see, we can view the HTML source code of the website.

#### **CSS**

CSS code is either defined internally within the same HTML file between <style> elements, or defined externally in a separate .css file and referenced within the HTML code.

In this case, we see that the CSS is internally defined, as seen in the code snippet below:

#### Code: html

If a page CSS style is externally defined, the external .css file is referred to with the Link> tag within the HTML head, as follows:

## **JavaScript**

The same concept applies to JavaScript. It can be internally written between <script> elements or written into a separate .js file and referenced within the HTML code.

We can see in our HTML source that the .js file is referenced externally:

```
Code: html

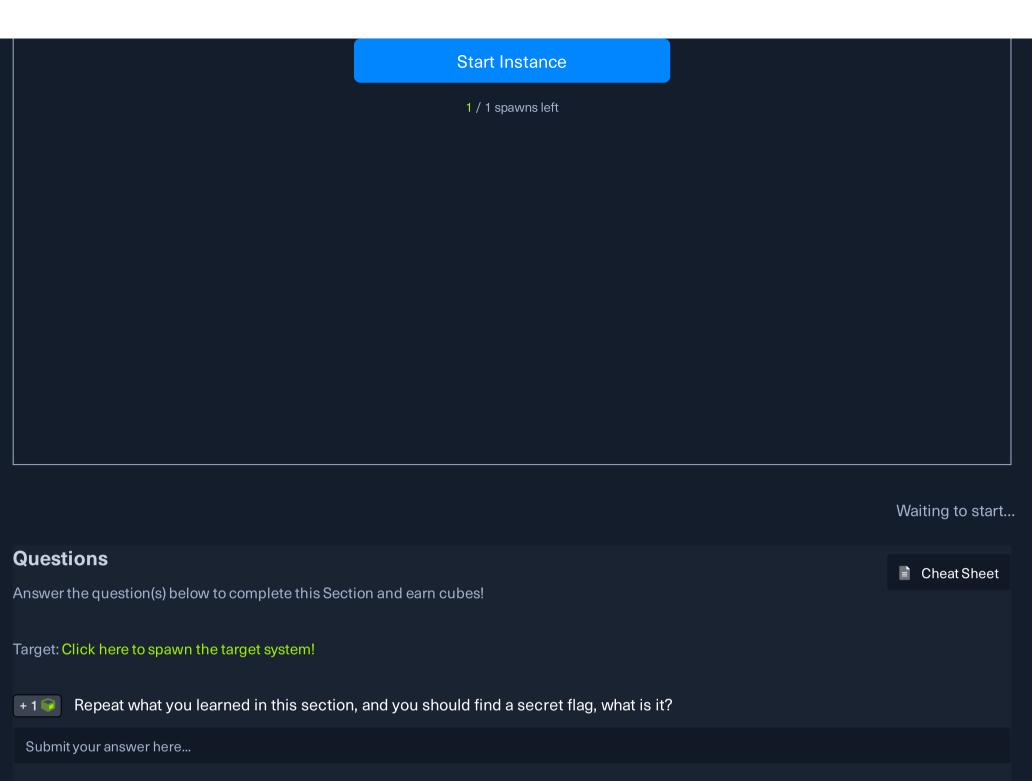
<script src="secret.js"></script>
```

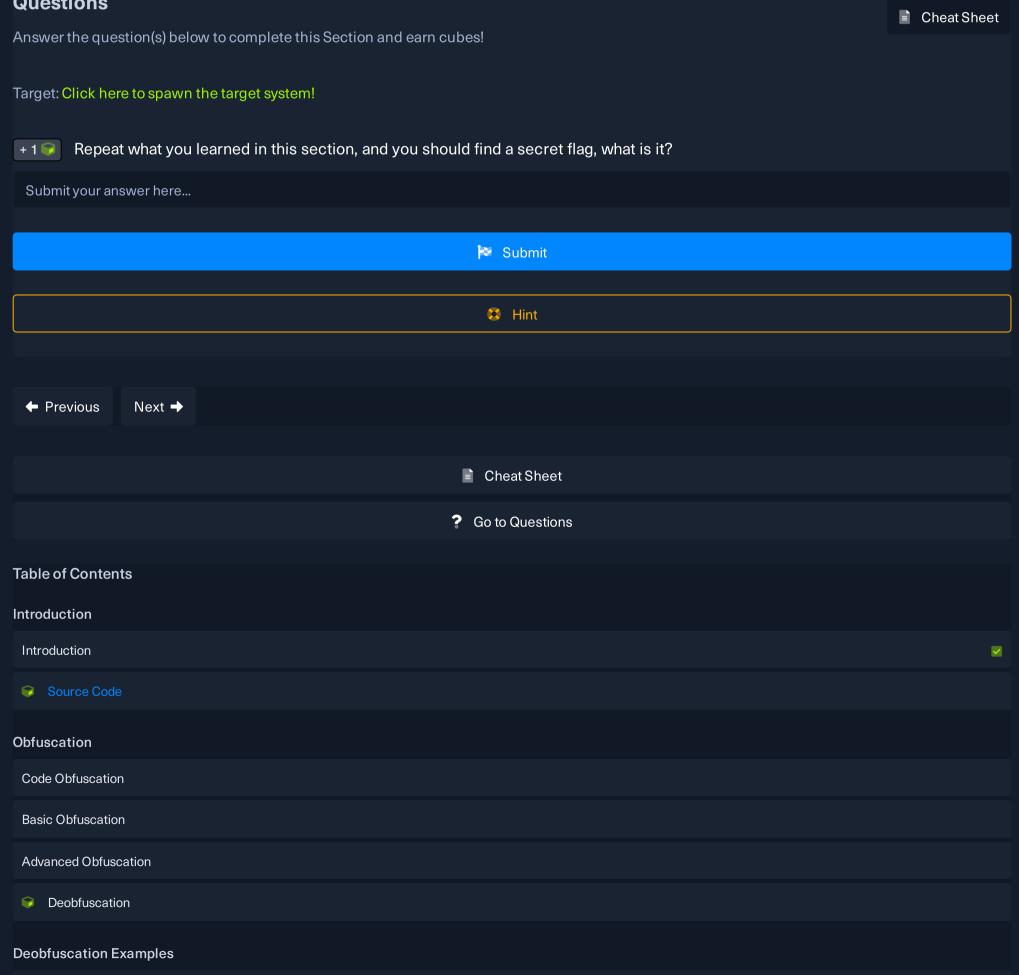
We can check out the script by clicking on secret.js, which should take us directly into the script. When we visit it, we see that the code is very complicated and cannot be comprehended:

```
Code: javascript

eval(function (p, a, c, k, e, d) { e = function (c) { '...SNIP... |true|function'.split('|'), 0, {}))
```

The reason behind this is code obfuscation. What is it? How is it done? Where is it used?





Code Analysis

Figure 1 HTTP Requests	
Decoding	
Skills Assessment	
Skills Assessment	
Summary	
My Workstation	
iviy vvoi katation	
	OFFLINE
	Start Instance
	1 / 1 spawns left