

## Client-side-again - picoGym Medium Web Exploitation

To start, the challenge presented me with a website to break into:

<http://jupiter.challenges.picoctf.org:60786>

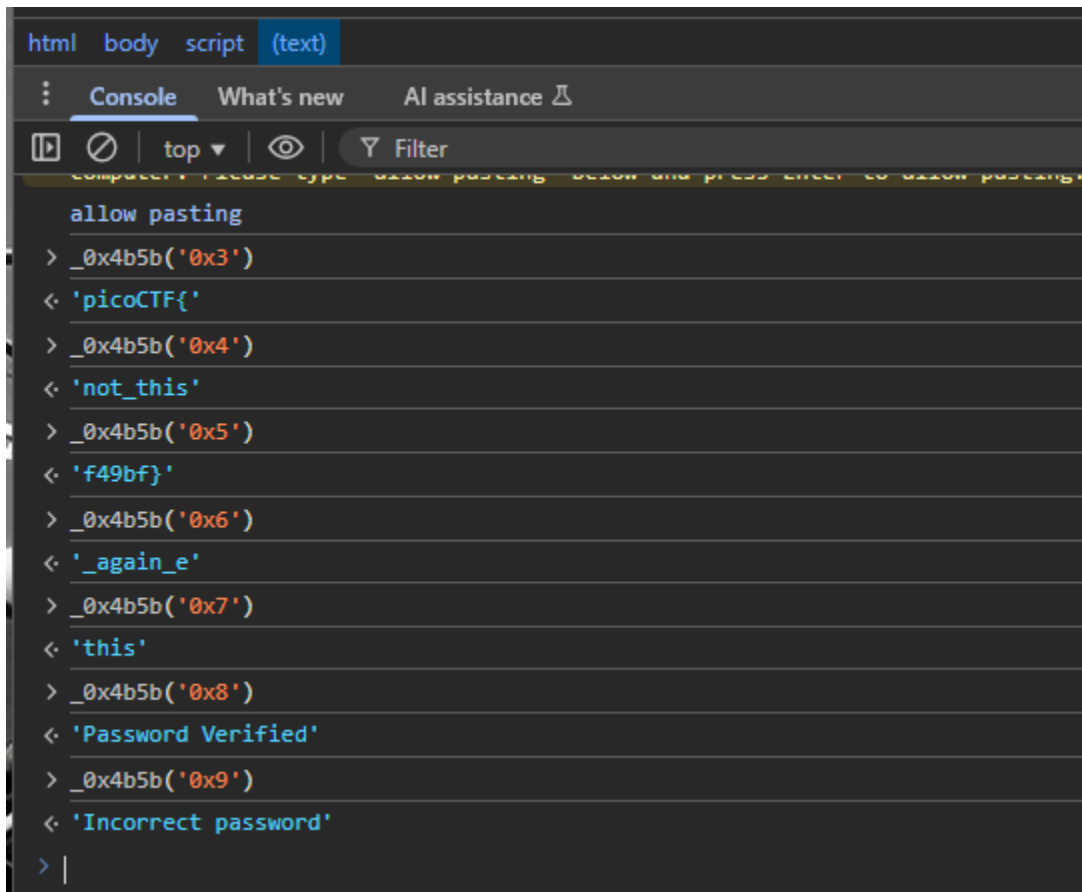
After inspecting element on the website, I found a javascript block of code:

```
var _0x5a46 = ['f49bf', '_again_e', 'this', 'Password\x20Verified', 'Incorrect\x20password',
'getElementById', 'value', 'substring', 'picoCTF{', 'not_this'];
(function(_0x4bd822, _0x2bd6f7) {
  var _0xb4bdb3 = function(_0x1d68f6) {
    while (--_0x1d68f6) {
      _0x4bd822['push'](_0x4bd822['shift']());
    }
  };
  _0xb4bdb3(++_0x2bd6f7);
})(_0x5a46, 0x1b3);
var _0x4b5b = function(_0x2d8f05, _0x4b81bb) {
  _0x2d8f05 = _0x2d8f05 - 0x0;
  var _0x4d74cb = _0x5a46[_0x2d8f05];
  return _0x4d74cb;
};

function verify() {
  checkpass = document[_0x4b5b('0x0')]( 'pass')[_0x4b5b('0x1')];
  split = 0x4;
  if (checkpass[_0x4b5b('0x2')](0x0, split * 0x2) == _0x4b5b('0x3')) {
    if (checkpass[_0x4b5b('0x2')](0x7, 0x9) == '{n'} {
      if (checkpass[_0x4b5b('0x2')](split * 0x2, split * 0x2 * 0x2) == _0x4b5b('0x4')) {
        if (checkpass[_0x4b5b('0x2')](0x3, 0x6) == 'oCT') {
          if (checkpass[_0x4b5b('0x2')](split * 0x3 * 0x2, split * 0x4 * 0x2) == _0x4b5b('0x5'))
        {
          if (checkpass['substring'](0x6, 0xb) == 'F{not') {
            if (checkpass[_0x4b5b('0x2')](split * 0x2 * 0x2, split * 0x3 * 0x2) ==
_0x4b5b('0x6')) {
              if (checkpass[_0x4b5b('0x2')](0xc, 0x10) == _0x4b5b('0x7')) {
                alert(_0x4b5b('0x8'));
              }
            }
          }
        }
      }
    }
  }
}
```

```
} else {  
    alert(_0x4b5b('0x9'));  
}  
}
```

After analyzing the code, I found that it's an obfuscated password check and that I had to look up what the verify function was de-obfuscating:



```
html body script (text)  
⋮ Console What's new AI assistance  
⏏ ⌛ top ⏏ Filter  
allow pasting  
> _0x4b5b('0x3')  
< 'picoCTF{'  
> _0x4b5b('0x4')  
< 'not_this'  
> _0x4b5b('0x5')  
< 'f49bf}'  
> _0x4b5b('0x6')  
< '_again_e'  
> _0x4b5b('0x7')  
< 'this'  
> _0x4b5b('0x8')  
< 'Password Verified'  
> _0x4b5b('0x9')  
< 'Incorrect password'  
> |
```

Looking at this output, I pieced the slices together that would makeup the flag and found this flag:

Flag: picoCTF{not\_this\_again\_ef49bf}