

# Homework

# Custom Wordlist

## Mission: Custom Wordlist

Welcome to TechCorp LTD, as part of our ongoing activities after a lot of tries with our red team we have not been able to reach a solution and we need your help in breaking passwords - the problem is that our team does not have enough experience other than challenges and we need you to provide us with a valid wordlist file.

**Theory:**

Password tokenizing and customizing a wordlist wisely to target is a real-world scenario processing that’s involving us as cyber researchers and consultants making some preparations before running naively brute-force attacks on certain targets.

Unfortunately, companies mostly use passwords with some keywords that could be found on their websites, because of these we need to prepare a target-wise custom wordlist. After the wordlist is created by scraping words from a website, we need to run it through some basic rules like if we found a key world, we need to append it a custom flavor like 123 as a suffix.

Further, in the course, we will use certain tools to do so, but now its your time to act and provide python skills to a better level.

**The Task:**

Our target is <http://scanme.nmap.org/>

1. Get familiar with the **beautifulsoup4** library (<https://www.crummy.com/software/BeautifulSoup/bs4/doc/>)
2. Get all the words from our target website, the first attempt will be on the words laying between **<p>** tags.
3. Filter out the common words like **the, in, a, an**, you could use the next reference (<https://www.espressoenglish.net/the-100-most-common-words-in-english/>)
4. Finalize the custom wordlist using the next rules, each word in the file running throw each of the rules (Example: **pass** becomes **ssap pass123 PASS123 Pass123)**

**The rules:**

* Reverse word
* If the length of the word less than 8 chars appends the numbers as needed in the next order 1234567890
* If the length of the word less than 8 chars appends continually the word until the end

(Example: **pass**  becomes **passpass)**

* Lower-case option