Salad Bowl - Flag 1 (“Lettuce” Folder)

- The goal for this flag was to find the message hidden in the image of the caesar salad
  - The message was hidden using LSB implemented with the **stegano** library for python
  - ***The message was also “encrypted” using a caesar cypher with a forward shift of 3***
- Some sample python code to get this message out might look like this:
  -
```python
from PIL import Image
from stegano import lsb
import sys

def unhide_message(image_path):
    unhidden_message = lsb.reveal(image_path)
    return unhidden_message


if __name__ == "__main__":
    image = sys.argv[1]

    unhidden_message = unhide_message(image)
    print(unhidden_message)
```
- This message would then need to be decrypted using a tool such as **dcode**
  - https://www.dcode.fr/caesar-cipher
- Once the message is decrypted, it should read:
  - **“ilovecaesardressing”**
- **The decrypted message is Flag 1**, and it also allows you to unlock the .7z archive to move on with the challenge

Salad Bowl - Flag 2 and 3 (“Dressing” Folder)

- The goal for these flags was to recognize that the 23 text documents were an anagram
- This anagram was a response to the first flag and when the letters are assembled in the right order they spell out: **“doyoulovecaesardressing”**
  - **This message was the Second Flag**
- Within each of the text documents was a section of an openssl private key which was to be used to decrypt the “useful_information.txt” file
  - Within the “useful_information.txt” file you would find:
    - Another openssl private key
    - The password for the decryption with the key
    - **The 3rd Flag**: “**manthisinfoisuseful”**
- **With the private key and password you can then decrypt the final zip file “cheese.zip”**

Salad Bowl - Flag 4 and 5 (“Cheese” Folder)

- The goal for Flag 4 was to realize that the article on the history of the caesar salad contained a hidden message
  - This message was hidden in the whitespace of the article using a tool called **snow**
    - **Snow whitespace-tool:** https://darkside.com.au/snow/
    - Using this tool, you would recover the following message:
      - **“arichhistory”**

        - This message was **Flag 4**
- The goal for Flag 5 was to realize that the image of anchovies contained a message as well
    - This used the same lsb technique as Flag 1
    - The message recovered was:
        - **“whyaretheseinhere”**
            - This message was **Flag 5**