1 Entropy of the book in python

I applied entropy to Dross's book.

```
from collections import Counter
import math
import pandas as pd

filename = '/content/cuento.txt'
with open(filename, 'r') as file:
content = file.read()
words = content.split()

count_words = pd.Series(Counter(words))
total_words = len(words)
entropy = 0

def shannon_entropy(p):
return -p * math.log2(p)

for word, count in count_words.items():
p = count / total_words
entropy += shannon_entropy(p)

print(f"Palabras:-{count_words}")
print(f"Entropia:-{entropy}")
```

1.1 Results

Palabras:
Valle 35
de 4250
la 3113
calma 11
www.lectulandia.com 220
...
alegró. 1
universo, 1
infinito. 1
220 1
221 1
Length: 18334, dtype: int64
Entropía: 10.496599886769218