

```
1 "C:\Users\squal\Dropbox\Engenharia Informatica\Projetos\PYTHON\
  TI\Ficha 2\venv\Scripts\python.exe" "C:/Users/squal/Dropbox/
  Engenharia Informatica/Projetos/PYTHON/TI/Ficha 2/main.py"
2 Escolha o ficheiro a ler:
3 1 - "lena.bmp"
4 2 - "binaria.bmp"
5 3 - "ct1.bmp"
6 4 - "texto.txt"
7 5 - "saxriff.wav"
8 OPÇÃO: 4
9 NOME DO FICHEIRO: "texto.txt"
10 -----
11 EX 1 a 3
12 Entropia: 4.19688854180325
13 -----
14 EX 4
15 Média ponderada: 4.217294900221729
16 Variância ponderada: 1.8827164074906229
17 -----
18 EX 5
19 Entropia pares: 3.754268679996628
20 -----
21 EX 6a
22 QUERY: Exemplo --- TARGET: Exemplo
23 infoMutua: [2.12192809 1.92192809 1.64643934 2.17095059 1.
  97095059 1.77095059
24 2.04643934 2.12192809 2.32192809 2.52192809 2.24643934 2.
  24643934
25 2.24643934 2.24643934 2.44643934 2.44643934 2.52192809 2.
  72192809
26 2.52192809 2.32192809 2.32192809 2.12192809 2.32192809 2.
  32192809
27 2.12192809 2.04643934 2.04643934 2.04643934 2.04643934 2.
  04643934
28 2.32192809 2.32192809 2.04643934 2.12192809 2.12192809 1.
  84643934
29 1.77095059 1.84643934 2.04643934 2.04643934 2.32192809]
30 -----
31 EX 6b
32 Traceback (most recent call last):
33   File "C:/Users/squal/Dropbox/Engenharia Informatica/Projetos/
  PYTHON/TI/Ficha 2/main.py", line 457, in <module>
34     main("texto.txt")
35   File "C:/Users/squal/Dropbox/Engenharia Informatica/Projetos/
  PYTHON/TI/Ficha 2/main.py", line 408, in main
36     exercicio_6b(data, alfabeto, "target01 - repeat.wav")
37   File "C:/Users/squal/Dropbox/Engenharia Informatica/Projetos/
```

```
37 PYTHON/TI/Ficha 2/main.py", line 324, in exercicio_6b
38     inf_mutua = inf_mutua_janelas(passo, num_janelas, data,
    data_target1, alfabeto)
39 File "C:/Users/squal/Dropbox/Engenharia Informatica/Projetos/
PYTHON/TI/Ficha 2/main.py", line 275, in inf_mutua_janelas
40     alfabeto)
41 File "C:/Users/squal/Dropbox/Engenharia Informatica/Projetos/
PYTHON/TI/Ficha 2/main.py", line 246, in
    cria_informacao_cada_janela
42     prob_y = calc_probabilidade(cria_ocorrencias(alfabeto,
    target))
43 File "C:/Users/squal/Dropbox/Engenharia Informatica/Projetos/
PYTHON/TI/Ficha 2/main.py", line 86, in cria_ocorrencias
44     ocorrencias[element] += 1
45 IndexError: index 127 is out of bounds for axis 0 with size 52
46 QUERY: saxwriff.wav --- TARGET: "target01 - repeat.wav"
47
48 Process finished with exit code 1
49
```