report2

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1 SPRAWOZDANIE

system operacyjny: Linux Ubuntu 22.04.4 LTS
Intel® Core™ i7-7500U CPU @ 2.70GHz × 4
RAM 16 Gb

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1.1 KONFIGURACJA

[1]:
```
import os
import main
from matplotlib import pyplot as plt
import numpy as np

TEST_SIZES = [10, 15, 20, 25, 20, 25, 30, 35, 40]
MAX_NUM = 100
MIN_NUM = 10
SOURCES = 'sources'
BINS = 'bins'
TESTS = 'tests'
RESULTS = 'results'
VERBOSE = False
```

1.2 TWORZENIE TESTÓW

[2]:
```
main.create_tests(TESTS, TEST_SIZES, MAX_NUM, MIN_NUM)
```

1.3 KOMPILACJA

[3]:
```
main.compile_sources(SOURCES, BINS, v=True)
```

```
Executing: gcc sources/AVL.c -o bins/AVL


Executing: gcc sources/BST.c -o bins/BST
```

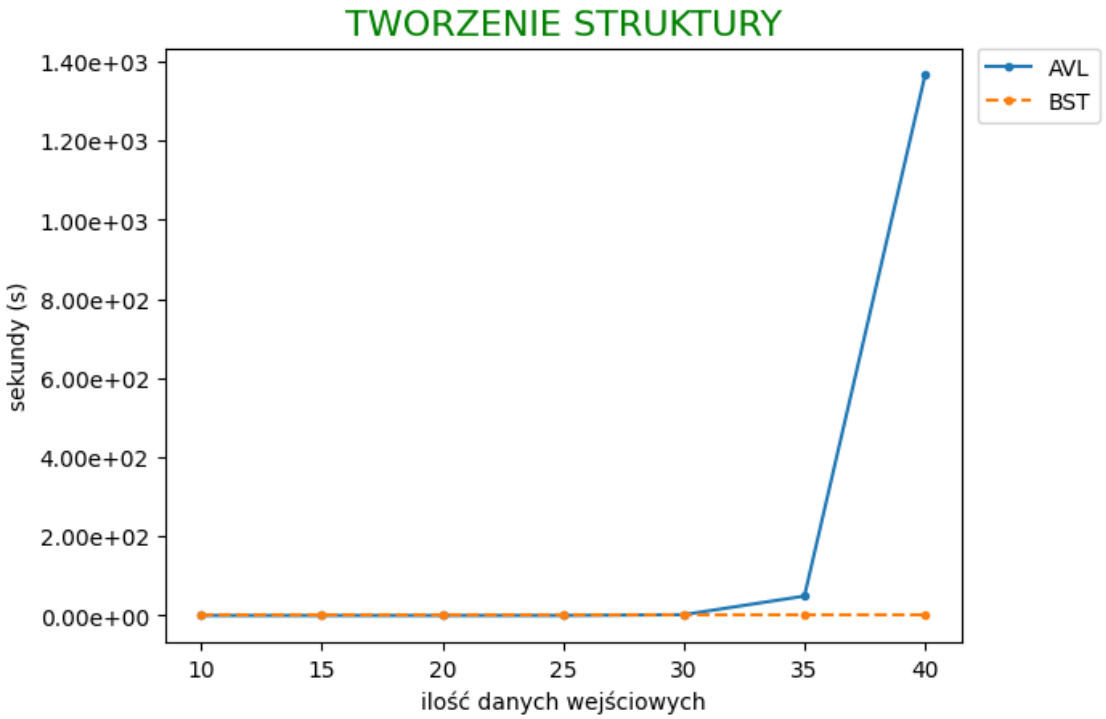
1.4 URUCHOMIENIE

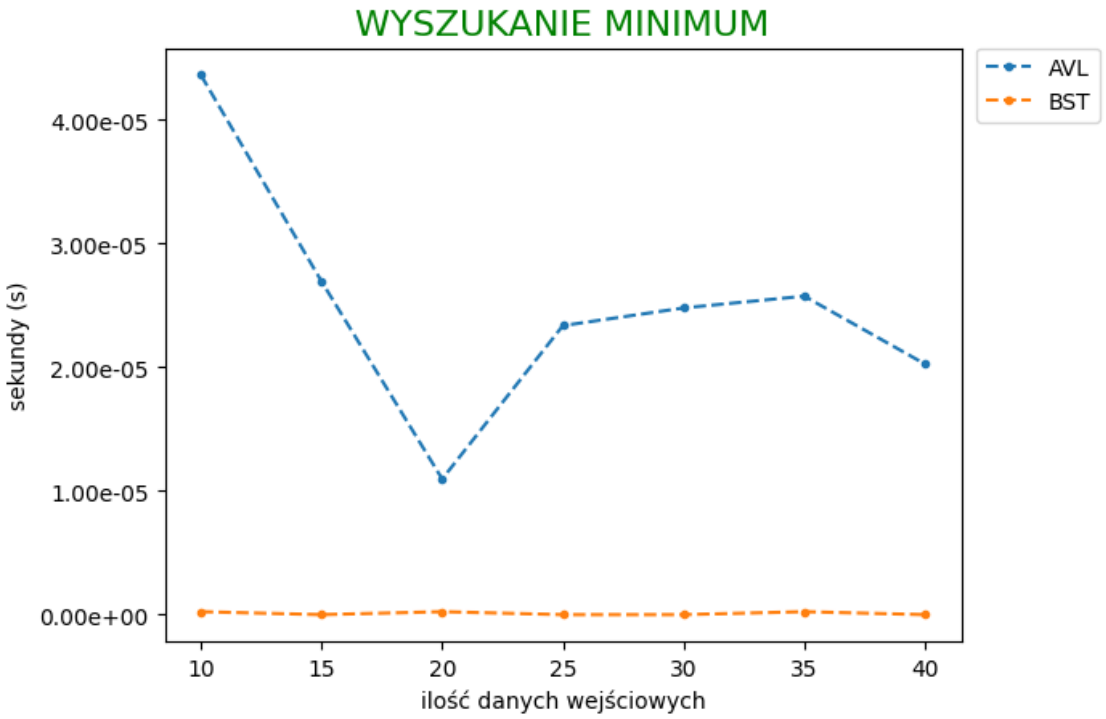
[4]:
```
for algo in os.listdir(BINS):
    for ts in TEST_SIZES:
        main.run_algo(BINS, TESTS, RESULTS, ts, algo, v=VERBOSE)
```

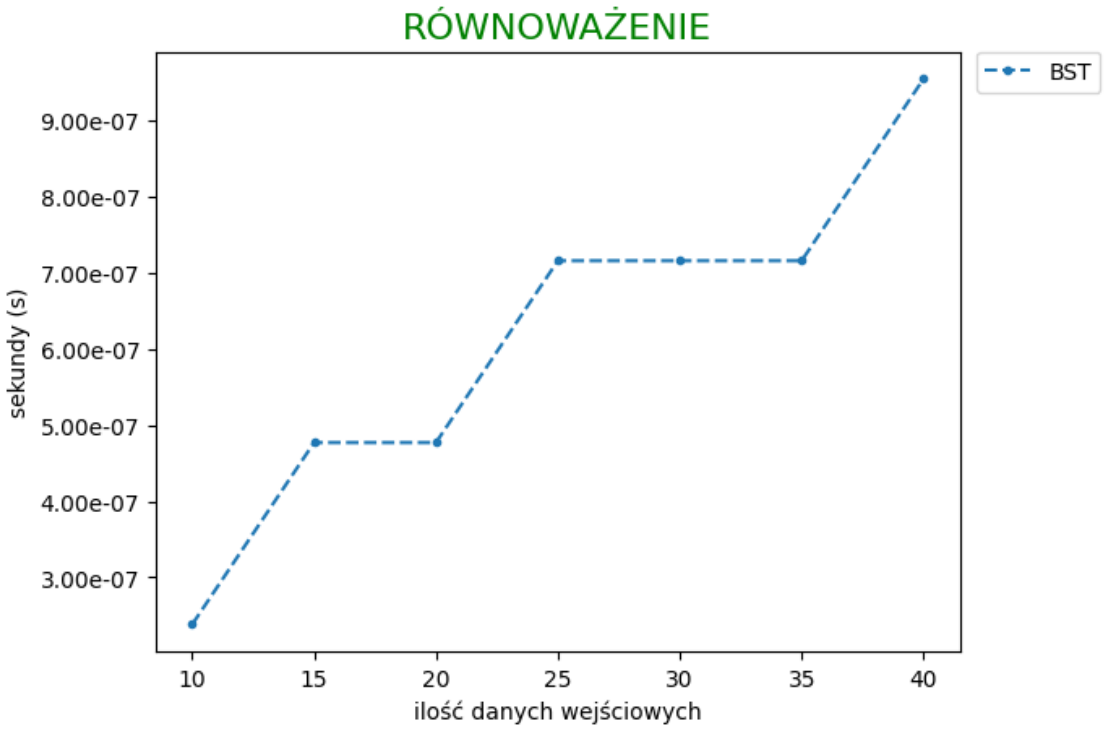
1.5 WYKRESY

[2]:
```
create, minim, balance = main.read_results(RESULTS)

plt.title("TWORZENIE STRUKTURY", fontsize=16, color='green')
main.plot_graf(create, marker='.', linestyle='-')
plt.title("WYSZUKANIE MINIMUM", fontsize=16, color='green')
main.plot_graf(minim, marker='.', linestyle='--')
plt.title("RÓWNOWAŻENIE", fontsize=16, color='green')
main.plot_graf(balance, marker='.', linestyle='-')
```




WYSZUKANIE MINIMUM
AVL
BST
4.00e-05
3.00e-05
2.00e-05
1.00e-05
0.00e+00
sekundy (s)
10
15
20
25
30
35
40
ilość danych wejściowych


RÓWNOWAŻENIE
BST
9.00e-07
8.00e-07
7.00e-07
6.00e-07
5.00e-07
4.00e-07
3.00e-07
sekundy (s)
10
15
20
25
30
35
40
ilość danych wejściowych