Relatório de desempenho

Máquina 01- Henrique

Dados: AMD Ryzen 5 5600 6-Core Processor 3.50 GHz

OpenMP

```
root@Henrique-Deskto:/home/linuxhenrique/dev# /usr/bin/time -v ./openmptestefinal
Dados análisado:
  "dataset_statistics": {
    "arestas": 5105039,
    "coeficiente_de_agrupamento_medio": 0.5142961475355128,
    "diametro": 21,
    "diametro_efetivo_90%": 9,
    "fracao_de_triangulos-fechados": 0.0552306264884374,
    "mais_largo_scc": {
      "arestas": 3419124,
      "fracao_total_de_arestas": 0.6697547266534105,
      "fracao_total_de_nos": 0.49653025591717836,
      "nos": 434818
    "mais_largo_wcc": {
      "arestas": 4291352,
      "fracao_total_de_arestas": 0.8406110119824746,
      "fracao_total_de_nos": 0.9772630987549574,
      "nos": 855802
    "nos": 875713,
    "numero_de_triangulos": 13391903
        Command being timed: "./openmptestefinal"
        User time (seconds): 707.21
        System time (seconds): 0.89
        Percent of CPU this job got: 1045%
        Elapsed (wall clock) time (h:mm:ss or m:ss): 1:07.74
        Average shared text size (kbytes): 0
        Average unshared data size (kbytes): 0
        Average stack size (kbytes): 0
Average total size (kbytes): 0
        Maximum resident set size (kbytes): 461608
        Average resident set size (kbytes): 0
        Major (requiring I/O) page faults: 33
        Minor (reclaiming a frame) page faults: 74188
        Voluntary context switches: 5160
        Involuntary context switches: 7032
        Swaps: 0
        File system inputs: 152584
        File system outputs: 0
        Socket messages sent: 0
        Socket messages received: 0
        Signals delivered: 0
        Page size (bytes): 4096
        Exit status: 0
root@Henrique-Deskto:/home/linuxhenrique/dev#|
```

Pthreads

```
Command being timed: "./pteste5"
User time (seconds): 615.22
System time (seconds): 0.41
Percent of CPU this job got: 655%
Elapsed (wall clock) time (h:mm:ss or m:ss): 1:33.90
Average shared text size (kbytes): 0
Average unshared data size (kbytes): 0
Average stack size (kbytes): 0
Average total size (kbytes): 0
Maximum resident set size (kbytes): 442948
Average resident set size (kbytes): 0
Major (requiring I/O) page faults: 1
Minor (reclaiming a frame) page faults: 69579
Voluntary context switches: 1270
Involuntary context switches: 266
Swaps: 0
File system inputs: 147344
File system outputs: 0
Socket messages sent: 0
Socket messages received: 0
Signals delivered: 0
Page size (bytes): 4096
Exit status: 0
```

Máquina 02- Henrique

AMD Ryzen™ 5 2500U with Radeon™ Vega Mobile Gfx × 8

```
Command being timed: "./teste07"
          User time (seconds): 1254.13
          System time (seconds): 2.61
          Percent of CPU this job got: 623%
          Elapsed (wall clock) time (h:mm:ss or m:ss): 3:21.51
          Average shared text size (kbytes): 0
          Average unshared data size (kbytes): 0
          Average stack size (kbytes): 0
          Average total size (kbytes): 0
          Maximum resident set size (kbytes): 439128
          Average resident set size (kbytes): 0
          Major (requiring I/O) page faults: 1
          Minor (reclaiming a frame) page faults: 141784
          Voluntary context switches: 77
          Involuntary context switches: 250559
          Swaps: 0
          File system inputs: 31696
          File system outputs: 0
          Socket messages sent: 0
          Socket messages received: 0
          Signals delivered: 0
          Page size (bytes): 4096
          Exit status: 0
OpenMP
```

Pthreads

```
/temporario/dev$ /usr/bin/time -v ./pt2
Command being timed: "./pt2"
User time (seconds): 1219.11
System time (seconds): 1.31
Percent of CPU this job got: 676%
Elapsed (wall clock) time (h:mm:ss or m:ss): 3:00.32
Average shared text size (kbytes): 0
Average unshared data size (kbytes): 0
Average stack size (kbytes): 0
Average total size (kbytes): 0
Maximum resident set size (kbytes): 440344
Average resident set size (kbytes): 0
Major (requiring I/O) page faults: 0
Minor (reclaiming a frame) page faults: 142161
Voluntary context switches: 25
Involuntary context switches: 112241
Swaps: 0
File system inputs: 0
File system outputs: 0
Socket messages sent: 0
Socket messages received: 0
Signals delivered: 0
Page size (bytes): 4096
Exit status: 0
```

Máquina 03- Geibson

Maquina virtual com 4 Núcleos alocados **Pthreads**

```
Command being timed: "./graph_analysis"
User time (seconds): 475.72
System time (seconds): 4.85
Percent of CPU this job got: 342%
Elapsed (wall clock) time (h:mm:ss or m:ss): 2:20.28
Average shared text size (kbytes): 0
Average unshared data size (kbytes): 0
Average stack size (kbytes): 0
Average total size (kbytes): 0
Maximum resident set size (kbytes): 440792
Average resident set size (kbytes): 0
Major (requiring I/O) page faults: 0
Minor (reclaiming a frame) page faults: 142198
Voluntary context switches: 18
Involuntary context switches: 64969
Swaps: 0
File system inputs: 0
File system outputs: 0
Socket messages sent: 0
Socket messages received: 0
Signals delivered: 0
Page size (bytes): 4096
Exit status: 0
```

OpenMP

```
______
Arquivo 'dados.json' gerado com sucesso!
       Command being timed: "./exec"
       User time (seconds): 436.73
       System time (seconds): 50.53
       Percent of CPU this job got: 349%
       Elapsed (wall clock) time (h:mm:ss or m:ss): 2:19.44
       Average shared text size (kbytes): 0
       Average unshared data size (kbytes): 0
       Average stack size (kbytes): 0
       Average total size (kbytes): 0
       Maximum resident set size (kbytes): 419628
       Average resident set size (kbytes): 0
       Major (requiring I/O) page faults: 0
       Minor (reclaiming a frame) page faults: 136854
       Voluntary context switches: 21
       Involuntary context switches: 64248
       Swaps: 0
       File system inputs: 0
       File system outputs: 8
       Socket messages sent: 0
       Socket messages received: 0
       Signals delivered: 0
       Page size (bytes): 4096
       Exit status: 0
```