


| Algorithmics | Student information | Date | Number of session |
|--------------|-----------------------|--|-------------------|
| | UO: 277921 | 2/2/2021 | 0 |
| | Surname: García López |  Escuela de Ingeniería Informática Universidad de Oviedo | |
| | Name: Rosa | | |



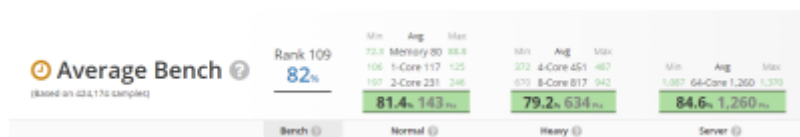
Activity 1. Benchmarking

Task 1

1. Processor: AMD Ryzen 7 2700X Eight-Core Processor
Installed memory (RAM): 8 GB



2. 1-Core average: 117



3. Time: 147

```
"Actividad 1. Tarea 1: Ejecutar este script en el ordenador de practicas"
"Compilar Benchmarking1"
"Ejecutar Benchmarking1"
n=1048576**TIME=147
```

4. $147 * 117 = 17,199$

| Algorithmics | Student information | Date | Number of session |
|--------------|-----------------------|----------|-------------------|
| | UO: 277921 | 2/2/2021 | 0 |
| | Surname: García López | | |
| | Name: Rosa | | |

Task 2

| | | | | |
|----|-------------------|-----|------|---------|
| 1 | i5-1035G1 | 283 | 150 | 42450 |
| 2 | i7 -7700HQ | 257 | 94.6 | 2431.2 |
| 3 | i5-7400 | 266 | 97 | 25802 |
| 4 | AMD Ryzen 7 2700X | 147 | 117 | 17199 |
| 5 | i5-1035G4 | 285 | 113 | 32205 |
| 6 | i7-9700f | 134 | 178 | 23852 |
| 7 | i7-2820QM | 611 | 82,6 | 50468,6 |
| 8 | AMD Ryzen 7 3750H | 166 | 93.1 | 15454.6 |
| 9 | i5-8300H | 573 | 94.6 | 54205.8 |
| 10 | i5-9600k | 171 | 153 | 26163 |
| 11 | i5-7400 | 266 | 97 | 2580 |

Conclusion

No, I do not think it would be correct to mix values from different CPUs in the same analytical study of the execution times of an algorithm. Every CPU is different so obviously the measurements will be very different.

Activity 2. Influence of the operating system

1. The balanced energy plan.
2. No, because the computer would respond very slowly and the measurements would not be realistic.
3. I think it is convenient but not appropriate, the measurements of each program should be made separately.