


Algorithmics	Student information	Date	Number of session
	UO:UO277653	5/2/21	0
	Surname: Stanci	 Escuela de Ingeniería Informática Universidad de Oviedo	
	Name:Stelian Adrian		



## Activity 1. Power of the CPUs

### Task 1

1. Intel(R) Core(TM) i7-10750H CPU @ 2.60GHz 2.59 GHz

Memory: 16,0 GB

Procesador

Intel(R) Core(TM) i7-10750H CPU  
@ 2.60GHz 2.59 GHz

RAM instalada

16,0 GB (15,8 GB usable)

7 Hits (showing 7)



Core i7-10750H

Intel

65,326 User benchmarks, average bench 86%

- 2.
3. 1-Core 127
4.  $n=1048576 \cdot \text{TIME}=185 \text{ millis}$
5.  $127 \text{ (SC Mix Avg)} \cdot 185 \text{ (t in millis)} = 23495 \text{ (index of integer and float operations)}$

### Task 2

#	CPU	Miliseconds	SC Mix (avg)	Operations (aprox.)
1.	i7-4500U	285	71.5	20378
2.	i3-3220	267	81.4	21734
3.	i5-4590	219	100	21900
4.	i7-4790	207	108	22356

Algorithmics	Student information	Date	Number of session
	UO:UO277653	5/2/21	0
	Surname: Stanci		
	Name:Stelian Adrian		

5.	Intel Pentium Gold G5400	215	103	22145
6.	i7-10750H	185	127	23495

## Conclusion:

No, as there are more factors that could interfere with the result. If you want to compare different algorithms you should execute them in the same computer.

## Activity 2. Influence of the operating system

### Conclusion:

1. In order to get the most stable experience you should use the High performance mode. When using it, the execution times won't change that much.
2. No, as it would affect the performance of the experiment and the time would be slowed down. It would take more time than when executing only the experiment.
3. No, as the workload of the computer would be excessively increased and it would show the performance that it has while executing all those measurements at the same time, not only one of them. All the results would be affected.