

Algorithmics	Student information	Date	Number of session
	UO: 300717	30/01/2025	
	Surname: Almoina Iglesias		
	Name: Martín		



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## Activity 1. [Factor 1 (problem size)]

n=	10000	20000	40000	80000	160000	320000	640000
A1(ms)	1606	6716	26281	103452	414681	OoT	OoT
A1(s)	1,606	6,716	26,281	103,452	414,681	OoT	OoT

## Activity 2. [Factor 2 (computer power)]

Pc1:			n=	10000	20000	40000	80000	160000	320000	640000
CPU :	12th Gen Intel Core i5-12400		A1(ms)	1606	6716	26281	103452	414681	OoT	OoT
RAM:	16 GB		A1(s)	1,606	6,716	26,281	103,452	414,681	OoT	OoT
Pc2:			n=	10000	20000	40000	80000	160000	320000	640000
CPU	i3-1005g1		A1(ms)	2813	12782	48088	210089	947838	OoT	OoT
RAM	8 GB		A1(s)	2,813	12,782	48,088	210,089	947,838	OoT	OoT

## Activity 3. [Factor 3 (implementation environment)]

n=	10000	20000	40000	80000	160000	320000	640000
A1(ms)	507	1839	7518	32766	130087	OoT	OoT
A1(s)	0,507	1,839	7,518	32,766	130,087	OoT	OoT

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## Activity 4. [Factor 4 (algorithm that is used)]

Python							
n=	10000	20000	40000	80000	160000	320000	640000
A1(ms)	2813	12782	48088	210089	947838	OoT	OoT
A1(s)	2,813	12,782	48,088	210,089	947,838	OoT	OoT
A2(ms)	319	1283	4891	29213	104238	324894	OoT
A2(s)	0,319	1,283	4,891	29,213	104,238	324,894	OoT
A3(ms)	193	617	1822	8720	30684	109600	380121
A3(s)	0,193	0,617	1,822	8,72	30,684	109,6	380,121
Java (Without Optimizations)							
n=	10000	20000	40000	80000	160000	320000	640000
A1(ms)	507	1839	7518	32766	130087	OoT	OoT
A1(s)	0,507	1,839	7,518	32,766	130,087	OoT	OoT
A2(ms)	55	210	719	3292	11273	41750	157793
A2(s)	0,055	0,21	0,719	3,292	11,273	41,75	157,793
A3(ms)	37	172	696	2945	9743	25791	93175
A3(s)	0,037	0,172	0,696	2,945	9,743	25,791	93,175
Java (With Optimizations)							
n=	10000	20000	40000	80000	160000	320000	640000
A1(ms)	106	374	1746	6575	25435	96427	OoT
A1(s)	0,106	0,374	1,746	6,575	25,435	96,427	OoT
A2(ms)	18	46	168	570	2969	8106	30816
A2(s)	0,018	0,046	0,168	0,57	2,969	8,106	30,816
A3(ms)	7	23	87	300	1223	4399	15415
A3(s)	0,007	0,023	0,087	0,3	1,223	4,399	15,415