

Ejercicio 1:

n	TBucle1(ms)	TBucle2(ms)	TBucle3(ms)	TBucle4(ms)
100	0	0	1	0
200	0	0	3	5
400	0	3	16	42
800	0	14	70	324
1600	0	53	266	2587
3200	1	254	1145	21023
6400	1	943	4755	167364
12800	1	4224	20214	FDT
25600	3	19301	83737	FDT
51200	8	78386	343223	FDT

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PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle1 1
n      tiempo  repeticiones  contador
100     0        1           603
200     0        1          1340
400     0        1          2937
800     0        1          6942
1600    0        1         14938
3200    1        1         32010
6400    1        1         68272
12800   1        1        153612
25600   3        1        324273
51200   8        1        682680
102400  14        1       1501874
204800  36        1       3140282
409600  64        1       6553608
819200  136       1      13653350
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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819200 136      1      13653350
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle2 1
n      tiempo  repeticiones  contador
100     0        1          25500
200     0        1         101000
400     3        1         482400
800    14        1        2245600
1600   53        1        8971200
3200  254        1       40985600
6400  943        1      163891200
12800 4224        1     737395200
25600 19301       1    3277056000
51200 78386       1   13107712000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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51200 78300 1 15107712000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle3 1
n tiempo repeticiones contador
100 1 1 71400
200 3 1 323200
400 16 1 1447200
800 70 1 6416000
1600 266 1 28195200
3200 1145 1 122956800
6400 4755 1 532646400
12800 20214 1 2294118400
25600 83737 1 9831168000
51200 343223 1 41944678400
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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51200 343223 1 41944678400
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle4 1
n tiempo repeticiones contador
100 0 1 171700
200 5 1 1353400
400 42 1 10746800
800 324 1 85653600
1600 2587 1 683947200
3200 21023 1 5466454400
6400 167364 1 43711148800
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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n	TBucle5(ms)	TBucle6(ms)	TBucle7(ms)
100	4	61	480
200	24	527	7188
400	114	4529	114076
800	534	39203	FDT
1600	2486	337773	FDT
3200	11485	FDT	FDT
6400	53390	FDT	FDT

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PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> javac -d . *.java
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle5 1
n tiempo repeticiones contador
100 4 1 490000
200 24 1 2560000
400 114 1 12960000
800 534 1 64000000
1600 2486 1 309760000
3200 11485 1 1474560000
6400 53390 1 6922240000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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6400 53390 1 6922240000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle6 1
n tiempo repeticiones contador
100 61 1 7000000
200 527 1 64000000
400 4529 1 576000000
800 39203 1 5120000000
1600 337773 1 45056000000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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1600 337773 1 45056000000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> java -Xint p12.Bucle7 1
n tiempo repeticiones contador
100 480 1 100000000
200 7188 1 1600000000
400 114076 1 25600000000
PS C:\Users\U0309022\Desktop\alg_JulioRegueiraGonzalezU0309022\p12> |

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n	TBucle1(ms)	TBucle2(ms)	t1/t2
100	0	0	0
200	0	0	0
400	0	3	0
800	0	14	0
1600	0	53	0
3200	1	254	0,003937008
6400	1	943	0,001060445
12800	1	4224	0,000236742
25600	3	19301	0,000155432
51200	8	78386	0,000102059

n	TBucle3(ms)	TBucle2(ms)	t3/t2
100	1	0	1
200	3	0	3
400	16	3	5,333333333
800	70	14	5
1600	266	53	5,018867925
3200	1145	254	4,507874016
6400	4755	943	5,042417815
12800	20214	4224	4,785511364
25600	83737	19301	4,338479872
51200	343223	78386	4,378626285

n	Bucle4 Python (t)	Bucle4 Java NO JIT (t)	tPython/tJava
100	4	0	4
200	41	5	8,2
400	316	42	7,523809524
800	2641	324	8,151234568
1600	22371	2587	8,64746811
3200	203529	21023	9,681253865
6400	FDT	167364	-