

Arquitecturas de Alto Desempenho  
Comparative analysis of the execution time under different conditions (computer system 1)

Comp Config		Intel(R) Core(TM) i7-8565U CPU @ 1.80GHz												
Operating System	Gcc version	<i>dhrystone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 5.8.11	10.2.1	0,503	0,499	0,507	0,507	0,514	<b>0,506</b>	0,158	0,159	0,157	0,158	0,157	<b>0,158</b>	<b>3,2</b>
Operating System	Gcc version	<i>whetstone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 5.8.11	10.2.1	1,306	1,309	1,319	1,314	1,305	<b>1,311</b>	0,382	0,381	0,384	0,387	0,389	<b>0,385</b>	<b>3,4</b>
Operating System	Gcc version	<i>primev1</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 5.8.11	10.2.1	1,974	1,995	2,002	2,085	1,989	<b>2,009</b>	1,611	1,610	1,653	1,611	1,608	<b>1,619</b>	<b>1,2</b>
Operating System	Gcc version	<i>primev2</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 5.8.11	10.2.1	5,759	5,779	5,783	5,796	5,799	<b>5,783</b>	4,093	4,101	4,088	4,099	4,083	<b>4,093</b>	<b>1,4</b>
Operating System	Gcc version	<i>crypt</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 5.8.11	10.2.1	0,563	0,558	0,574	0,576	0,577	<b>0,570</b>	0,293	0,286	0,274	0,287	0,291	<b>0,286</b>	<b>2,0</b>
Operating System	Gcc version	<i>newCript</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 5.8.11	10.2.1	2,307	2,324	2,275	2,301	2,329	<b>2,307</b>	1,724	1,732	1,755	1,794	1,706	<b>1,742</b>	<b>1,3</b>

Arquitecturas de Alto Desempenho  
Comparative analysis of the execution time under different conditions (computer system 2)

Comp Config		Intel(R) Core(TM) 4 x i5-6200U CPU @ 2.30GHz / 8GB												
Operating System	Gcc version	<i>dhrystone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 10	6.4.0	0,843	0,798	0,812	0,798	0,798	<b>0,810</b>	0,140	0,140	0,140	0,140	0,140	<b>0,140</b>	<b>5,8</b>
linux 4.12.9	6.4.1	0,821	0,817	0,826	0,824	0,822	<b>0,822</b>	0,252	0,249	0,259	0,252	0,252	<b>0,253</b>	<b>3,3</b>
linux 4.18.5	8.1.1	0,844	0,838	0,859	0,836	0,853	<b>0,846</b>	0,284	0,288	0,289	0,290	0,285	<b>0,287</b>	<b>2,9</b>
linux 4.18.8	8.1.1	0,920	1,047	0,992	0,926	0,931	<b>0,963</b>	0,274	0,264	0,264	0,265	0,264	<b>0,266</b>	<b>3,6</b>
linux 5.0.16	8.3.1	0,842	0,966	0,958	0,955	0,868	<b>0,918</b>	0,256	0,254	0,259	0,254	0,274	<b>0,259</b>	<b>3,5</b>
Operating System	Gcc version	<i>whetstone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 10	6.4.0	3,218	3,187	3,156	3,203	3,187	<b>3,190</b>	0,578	0,562	0,562	0,578	0,578	<b>0,572</b>	<b>5,6</b>
linux 4.12.9	6.4.1	2,359	2,346	2,348	2,339	2,337	<b>2,346</b>	0,902	0,918	0,902	0,900	0,898	<b>0,904</b>	<b>2,6</b>
linux 4.18.5	8.1.1	2,190	2,173	2,182	2,171	2,197	<b>2,183</b>	0,738	0,730	0,739	0,716	0,737	<b>0,732</b>	<b>3,0</b>
linux 4.18.8	8.1.1	2,217	2,225	2,253	2,217	2,222	<b>2,227</b>	0,730	0,772	0,774	0,766	0,768	<b>0,762</b>	<b>2,9</b>
linux 5.0.16	8.3.1	2,272	2,297	2,462	2,463	2,271	<b>2,353</b>	0,744	0,717	0,717	0,741	0,744	<b>0,733</b>	<b>3,2</b>

Arquitecturas de Alto Desempenho  
Comparative analysis of the execution time under different conditions (computer system 2)

Operating System	Gcc version	<i>primev1</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 10	6.4.0	3,406	3,406	3,406	3,406	3,406	<b>3,406</b>	3,031	3,031	3,031	3,015	3,031	<b>3,028</b>	<b>1,1</b>
linux 4.12.9	6.4.1	3,253	3,287	3,291	3,283	3,260	<b>3,275</b>	2,929	2,941	2,932	2,930	2,928	<b>2,932</b>	<b>1,1</b>
linux 4.18.5	8.1.1	3,277	3,307	3,264	3,254	3,277	<b>3,276</b>	2,621	2,628	2,632	2,621	2,624	<b>2,625</b>	<b>1,2</b>
linux 4.18.8	8.1.1	3,899	3,343	3,914	3,352	3,334	<b>3,568</b>	2,681	2,679	2,954	2,678	2,922	<b>2,783</b>	<b>1,3</b>
linux 5.0.16	8.3.1	3,322	3,292	3,309	3,311	3,386	<b>3,324</b>	2,664	2,640	2,714	2,647	2,658	<b>2,665</b>	<b>1,2</b>
Operating System	Gcc version	<i>primev2</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 10	6.4.0	9,187	9,187	9,124	9,203	9,375	<b>9,215</b>	6,374	6,328	6,327	6,358	6,375	<b>6,352</b>	<b>1,5</b>
linux 4.12.9	6.4.1	8,098	8,153	8,093	8,089	8,124	<b>8,111</b>	5,488	5,488	5,484	5,489	5,488	<b>5,487</b>	<b>1,5</b>
linux 4.18.5	8.1.1	10,992	11,059	11,088	11,158	11,161	<b>11,092</b>	5,358	5,404	5,356	5,416	5,361	<b>5,379</b>	<b>2,1</b>
linux 4.18.8	8.1.1	11,636	11,694	11,571	12,113	11,980	<b>11,799</b>	5,696	5,593	5,660	5,623	5,611	<b>5,637</b>	<b>2,1</b>
linux 5.0.16	8.3.1	11,244	11,253	11,349	11,160	11,278	<b>11,257</b>	5,375	5,334	5,317	5,338	5,316	<b>5,336</b>	<b>2,1</b>

Arquitecturas de Alto Desempenho  
Comparative analysis of the execution time under different conditions (computer system 2)

Operating System	Gcc version	<i>crypt</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 4.18.5	8.1.1	0,889	0,890	0,889	0,895	0,888	<b>0,890</b>	0,388	0,397	0,386	0,398	0,393	<b>0,392</b>	<b>2,3</b>
linux 4.18.8	8.1.1	1,100	0,975	0,998	0,918	0,928	<b>0,984</b>	0,433	0,415	0,427	0,442	0,421	<b>0,428</b>	<b>2,3</b>
linux 5.0.16	8.3.1	0,904	0,899	0,896	0,899	0,900	<b>0,900</b>	0,402	0,388	0,394	0,399	0,385	<b>0,394</b>	<b>2,3</b>
Operating System	Gcc version	<i>newCrypt</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 4.18.5	8.1.1	8,817	7,950	7,611	5,247	5,443	<b>7,014</b>	17,560	5,577	11,660	4,518	11,700	<b>10,203</b>	<b>0,7</b>
linux 4.18.8	8.1.1	4,981	9,318	5,628	3,772	4,582	<b>5,656</b>	6,739	8,343	4,286	8,586	7,829	<b>7,157</b>	<b>0,8</b>
linux 5.0.16	8.3.1	7,962	9,647	6,329	5,124	7,178	<b>7,248</b>	5,924	8,515	6,032	8,514	8,312	<b>7,459</b>	<b>1,0</b>

Arquitecturas de Alto Desempenho  
Comparative analysis of the execution time under different conditions (computer system 3)

Intel(R) Core(TM) i5-4300M CPU @ 2.60GHz / 8 GB														
Operating System	Gcc version	<i>dhrystone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 7	5.4.0	0,826	0,812	0,826	0,873	0,842	<b>0,836</b>	0,140	0,140	0,152	0,140	0,140	<b>0,142</b>	<b>5,9</b>
linux 3.19.8	4.8.3	0,715	0,768	0,773	0,783	0,778	<b>0,763</b>	0,237	0,295	0,232	0,233	0,205	<b>0,240</b>	<b>3,2</b>
Operating System	Gcc version	<i>primev1</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 7	5.4.0	4,773	4,773	4,711	4,617	4,617	<b>4,698</b>	3,759	4,009	4,009	3,822	3,806	<b>3,881</b>	<b>1,2</b>
linux 3.19.8	4.8.3	3,836	3,929	3,909	3,937	3,820	<b>3,886</b>	3,376	3,338	3,285	3,300	3,287	<b>3,317</b>	<b>1,2</b>
Operating System	Gcc version	<i>primev2</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 7	5.4.0	11,528	11,466	11,465	11,450	11,449	<b>11,472</b>	8,127	8,127	8,127	8,174	8,174	<b>8,146</b>	<b>1,4</b>
linux 3.19.8	4.8.3	11,187	11,000	10,913	10,874	11,057	<b>11,006</b>	7,966	7,849	7,921	7,900	7,946	<b>7,916</b>	<b>1,4</b>
Operating System	Gcc version	<i>crypt</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 7	5.4.0	1,004	1,045	1,025	0,999	1,084	<b>1,031</b>	0,378	0,372	0,375	0,374	0,380	<b>0,376</b>	<b>2,7</b>
linux 3.19.8	4.8.3	0,920	0,925	0,929	0,932	0,916	<b>0,924</b>	0,352	0,354	0,344	0,358	0,347	<b>0,351</b>	<b>2,6</b>
Operating System	Gcc version	<i>newCript</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
windows 7	5.4.0	5,767	5,731	5,743	5,751	5,747	<b>5,748</b>	5,641	5,627	5,647	5,638	5,641	<b>5,639</b>	<b>1,0</b>
linux 3.19.8	4.8.3	5,993	6,035	5,285	5,282	5,253	<b>5,570</b>	6,021	5,206	6,082	5,974	5,939	<b>5,844</b>	<b>1,0</b>

Arquitecturas de Alto Desempenho  
Comparative analysis of the execution time under different conditions (computer system 4)

Comp Config		Intel(R) Core(TM)2 Duo CPU T5800 @ 2.00GHz / 3GB												
Operating System	Gcc version	<i>dhrystone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 3.19.8	4.8.3	1,737	1,733	1,722	1,734	1,728	<b>1,731</b>	0,369	0,356	0,305	0,304	0,343	<b>0,335</b>	<b>5,2</b>
Operating System	Gcc version	<i>whetstone</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 3.19.8	4.8.3	5,287	5,282	5,290	5,287	5,285	<b>5,286</b>	1,982	1,980	1,978	1,977	1,969	<b>1,977</b>	<b>2,7</b>
Operating System	Gcc version	<i>primev1</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 3.19.8	4.8.3	9,617	9,615	9,619	9,609	9,627	<b>9,617</b>	9,920	9,925	9,913	9,916	9,918	<b>9,918</b>	<b>1,0</b>
Operating System	Gcc version	<i>primev2</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 3.19.8	4.8.3	23,989	23,831	23,778	23,867	24,219	<b>23,937</b>	19,379	19,195	19,237	19,204	19,197	<b>19,242</b>	<b>1,2</b>
Operating System	Gcc version	<i>crypt</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 3.19.8	4.8.3	2,285	2,279	2,309	2,245	2,303	<b>2,284</b>	0,652	0,644	0,644	0,645	0,642	<b>0,645</b>	<b>3,5</b>
Operating System	Gcc version	<i>newCRIPT</i>												
		no opt						opt						
		<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>run 1</i>	<i>run 2</i>	<i>run 3</i>	<i>run 4</i>	<i>run 5</i>	<i>aver</i>	<i>speed up</i>
linux 3.19.8	4.8.3	14,220	14,550	12,840	13,770	14,480	<b>13,972</b>	18,740	19,090	18,730	20,320	18,820	<b>19,140</b>	<b>0,7</b>