

# Compiled

General							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C	2,364	1,201	66,643	206,135	1	1	Imperative
C++	2,286	1,227	67,162	219,207	2	2	OO, Imperative
Ada	3,501	1,941	96,143	312,421	3	3	OO, Imperative
Pascal	7,601	4,486	157,002	671,455	4	4	Imperative
Haskell	8,236	5,293	206,918	684,366	5	5	Funcional

Binary							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C	1,125	0,622	39,800	148,258	1	1	Imperative
C++	1,129	0,630	41,230	155,727	2	2	OO, Imperative
Ada	2,822	1,983	95,020	385,866	3	3	OO, Imperative
Haskell	11,582	7,046	270,150	816,672	5	4	Funcional
Pascal	16,079	10,287	214,640	856,780	4	5	Imperative

Fannkuch							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C	6,076	2,557	215,920	527,574	1	1	Imperative
C++	6,123	2,492	219,890	548,432	2	2	OO, Imperative
Ada	7,351	2,963	264,980	628,843	3	3	OO, Imperative
Pascal	9,807	4,104	343,550	844,977	4	4	Imperative
Haskell	14,666	10,476	433,680	1593,806	5	5	Funcional

Fasta							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C	0,973	1,149	27,640	114,083	1	1	Imperative
C++	1,164	1,264	34,880	142,337	2	2	OO, Imperative
Ada	2,765	2,512	40,450	167,676	3	3	OO, Imperative
Pascal	5,478	4,343	68,630	295,862	4	4	Imperative
Haskell	5,728	4,217	205,520	664,002	5	5	Funcional

Mandelbrot							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C	1,142	0,479	35,390	112,623	2	1	Imperative
C++	0,864	0,480	32,440	125,188	1	2	OO, Imperative
Ada	3,192	1,033	97,590	247,562	3	3	OO, Imperative
Haskell	6,028	4,193	169,600	569,658	4	4	Funcional
Pascal	7,190	4,981	212,670	766,604	5	5	Imperative

N-body							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C	4,190	2,240	59,450	176,833	3	1	Imperative
C++	3,770	2,339	57,300	199,007	2	2	OO, Imperative
Ada	4,098	2,623	51,790	216,298	1	3	OO, Imperative
Pascal	5,702	3,095	64,870	220,815	4	4	Imperative
Haskell	10,037	5,610	127,820	407,153	5	5	Funcional

Spectral							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
C++	0,665	0,160	17,230	23,288	1	1	OO, Imperative
C	0,677	0,160	21,660	27,459	2	2	Imperative
Haskell	1,373	0,217	34,740	30,833	4	3	Funcional
Pascal	1,349	0,105	37,650	33,187	5	4	Imperative
Ada	0,775	0,530	27,030	90,204	3	6	OO, Imperative

# Interpreted

General							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	13,367	8,203	192,353	851,364	1	1	OO, Scripting
Dart	13,773	8,765	199,232	956,296	2	2	OO, Scripting
PHP	78,338	39,583	2380,527	6462,751	3	3	OO, Scripting
JRuby	113,818	80,307	3527,398	12492,886	4	4	Scripting
Ruby	166,949	105,054	5636,157	17183,644	5	5	Scripting, Funcional
Python	143,993	120,475	6286,523	19067,487	6	6	OO, Scripting
Perl	191,956	115,179	6641,842	19229,640	7	7	OO, Imperative, Funcional

Binary							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	21,349	11,455	312,140	1246,836	2	1	OO, Scripting
Dart	17,197	12,054	290,270	1262,578	1	2	OO, Scripting
Ruby	26,634	11,415	855,120	2412,344	4	3	Scripting, Funcional
Jruby	19,276	12,871	720,530	2682,286	3	4	Scripting
PHP	42,316	17,612	1397,510	3402,135	5	5	OO, Scripting
Python	45,003	20,242	1793,460	3979,624	6	6	OO, Scripting
Perl	96,097	67,624	3542,200	11474,379	7	7	OO, Imperative, Funcional

Fannkuch							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	33,663	24,803	413,900	1805,279	1	1	OO, Scripting
Dart	38,678	27,233	487,290	2485,435	2	2	OO, Scripting
PHP	125,975	46,713	5731,880	8985,842	3	3	OO, Scripting
Perl	249,418	105,385	11133,490	19947,253	5	4	OO, Imperative, Funcional
Python	31,558	117,657	12784,090	21469,747	6	5	OO, Scripting
Jruby	219,148	145,133	7819,030	25314,842	4	6	Scripting
Ruby	315,583	224,567	14064,980	42901,450	7	7	Scripting, Funcional

Fasta							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	5,098	3,776	64,840	233,328	2	1	OO, Scripting
Dart	4,787	4,210	63,610	333,188	1	2	OO, Scripting
PHP	29,508	19,970	430,730	1908,741	3	3	OO, Scripting
Perl	61,463	31,868	2684,330	3101,250	7	4	OO, Imperative, Funcional
Jruby	49,509	37,142	912,930	3722,026	5	5	Scripting
Ruby	61,216	42,440	852,300	4144,757	4	6	Scripting, Funcional
Python	74,111	49,800	1061,410	4508,876	6	7	OO, Scripting

Mandelbrot							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	8,278	1,999	233,040	494,818	2	1	OO, Scripting
Dart	10,046	2,740	214,740	571,253	1	2	OO, Scripting
PHP	73,741	26,315	3374,290	5152,519	3	3	OO, Scripting
Python	16,333	74,095	7790,160	14118,908	4	4	OO, Scripting
Ruby	245,248	106,537	11050,980	20358,194	6	5	Scripting, Funcional
Perl	389,587	153,444	16965,060	29988,293	7	6	OO, Imperative, Funcional
Jruby	217,118	159,168	8401,950	33834,189	5	7	Scripting

N-body							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	6,763	5,078	78,740	343,813	1	1	OO, Scripting
Dart	6,827	4,137	84,330	361,120	2	2	OO, Scripting
Jruby	98,407	68,549	1889,850	8188,760	3	3	Scripting
PHP	179,360	118,795	2468,300	11879,277	4	4	OO, Scripting
Ruby	281,470	210,540	3870,670	20646,820	5	5	Scripting, Funcional
Python	559,214	364,146	7879,920	35443,585	7	6	OO, Scripting
Perl	335,391	322,761	4663,480	35896,837	6	7	OO, Imperative, Funcional

Spectral							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
JavaScript	5,048	2,108	51,460	134,893	7	7	OO, Scripting
Dart	5,102	2,217	55,150	185,507	8	8	OO, Scripting
PHP	19,128	8,093	880,450	1640,479	11	10	OO, Scripting
Perl	19,782	9,993	862,490	2386,203	10	11	OO, Imperative, Funcional
Ruby	71,540	34,829	3122,890	6694,626	13	12	Scripting, Funcional
Jruby	79,449	58,982	1420,100	6978,705	12	13	Scripting
Python	137,738	96,909	6410,100	18617,474	14	14	OO, Scripting

## Virtual Machine

General							
	me SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	3,992	1,904	113,273	337,046	1	1	OO
Erlang	83,407	41,769	2805,190	6868,359	2	2	Imperative, Funcional

Binary							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	3,306	1,440	111,840	346,193	1	1	OO
ErLang	7,327	3,647	266,140	774,015	2	2	Imperative, Funcional

Fannkuch							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	8,241	3,451	311,380	735,303	1	1	OO
ErLang	101,839	39,444	4148,380	7654,466	2	2	Imperative, Funcional

Fasta							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	1,249	1,490	35,860	143,848	1	1	OO
ErLang	27,852	19,310	477,810	1947,949	2	2	Imperative, Funcional

Mandelbrot							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	3,657	1,226	114,230	300,556	1	1	OO
ErLang	194,726	81,386	9172,720	15407,026	2	2	Imperative, Funcional

N-body							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	5,839	3,389	65,150	272,382	1	1	OO
ErLang	150,698	100,138	1998,660	9416,256	2	2	Imperative, Funcional

Spectral							
Language	Time SwE	Time HwM	Energy SwE	Energy HwM	Position SwE	Position HwM	Paradigm
Java	1,659	0,426	41,180	79,640	1	1	OO
ErLang	17,998	6,687	767,430	1311,304	2	2	Imperative, Funcional