

Tool Name	Execution Time (s)	Total Energy (J)	CPU Energy (J)	Memory Energy (J)	Energy/Time (J/s)
CMake	1 (2.0)	2 (3.2)	1 (3.5)	1 (2.0)	1 (1.0)
qmake	3 (2.3)	7 (6.0)	7 (6.7)	4 (2.7)	1 (1.0)
Qbs	4 (2.5)	9 (7.5)	9 (8.5)	6 (3.0)	1 (1.0)
NetBeans IDE	4 (2.5)	5 (5.0)	4 (5.5)	3 (2.5)	1 (1.0)
Code::Blocks	6 (3.0)	10 (9.0)	10 (10.0)	6 (3.0)	1 (1.0)
CLion	1 (2.0)	2 (3.2)	1 (3.5)	1 (2.0)	1 (1.0)
CodeLite	4 (2.5)	5 (5.0)	4 (5.5)	3 (2.5)	1 (1.0)
Eclipse CDT	1 (2.0)	5 (5.0)	6 (6.0)	1 (2.0)	1 (1.0)
KDevelop	1 (2.0)	2 (3.2)	1 (3.5)	1 (2.0)	1 (1.0)
Geany	6 (3.0)	10 (9.0)	11 (11.0)	6 (3.0)	1 (1.0)
Anjuta DevStudio	5 (2.8)	8 (7.0)	8 (8.2)	5 (2.8)	1 (1.0)
Qt Creator	2 (2.2)	6 (5.1)	5 (5.7)	2 (2.4)	1 (1.0)
DialogBlocks	4 (2.5)	5 (5.0)	6 (6.0)	3 (2.5)	1 (1.0)
Zinjal	4 (2.5)	3 (4.0)	2 (4.0)	3 (2.5)	1 (1.0)
GPS	1 (2.0)	4 (4.5)	3 (4.8)	1 (2.0)	1 (1.0)
Oracle Developer Studio	4 (2.5)	5 (5.0)	4 (5.5)	3 (2.5)	1 (1.0)
Sphere Engine	1 (2.0)	1 (3.0)	2 (4.0)	1 (2.0)	1 (1.0)
AWS Cloud9	6 (3.0)	9 (7.5)	9 (8.5)	6 (3.0)	1 (1.0)

Table 1: N-body tools ranked with 0 decimal points

Tool Name	Execution Time (s)	Total Energy (J)	CPU Energy (J)	Memory Energy (J)	Energy/Time (J/s)
CMake	2 (3.0)	1 (6.5)	1 (6.5)	2 (2.5)	4 (4.0)
qmake	7 (4.3)	9 (14.7)	9 (14.7)	6 (4.0)	7 (5.3)
Qbs	8 (5.0)	11 (16.5)	11 (16.5)	8 (4.5)	6 (5.0)
NetBeans IDE	5 (4.0)	6 (11.0)	6 (11.0)	5 (3.5)	6 (5.0)
Code::Blocks	8 (5.0)	13 (20.0)	13 (20.0)	9 (5.0)	3 (3.0)
CLion	2 (3.0)	1 (6.5)	1 (6.5)	2 (2.5)	4 (4.0)
CodeLite	3 (3.5)	5 (10.5)	5 (10.5)	5 (3.5)	4 (4.0)
Eclipse CDT	2 (3.0)	8 (11.5)	8 (11.5)	3 (3.0)	2 (2.5)
KDevelop	2 (3.0)	1 (6.5)	1 (6.5)	2 (2.5)	4 (4.0)
Geany	8 (5.0)	14 (21.0)	14 (21.0)	9 (5.0)	3 (3.0)
Anjuta DevStudio	6 (4.2)	10 (15.8)	10 (15.8)	7 (4.2)	4 (4.0)
Qt Creator	4 (3.9)	7 (11.4)	7 (11.4)	4 (3.4)	5 (4.7)
DialogBlocks	3 (3.5)	6 (11.0)	6 (11.0)	5 (3.5)	8 (5.5)
Zinjal	5 (4.0)	3 (8.5)	3 (8.5)	5 (3.5)	3 (3.0)
GPS	2 (3.0)	4 (9.8)	4 (9.8)	3 (3.0)	4 (4.0)
Oracle Developer Studio	5 (4.0)	6 (11.0)	6 (11.0)	5 (3.5)	6 (5.0)
Sphere Engine	1 (2.0)	2 (8.0)	2 (8.0)	1 (2.0)	9 (8.0)
AWS Cloud9	8 (5.0)	12 (17.0)	12 (17.0)	9 (5.0)	1 (2.0)

Table 2: N-body tools ranked with 1 decimal points

Tool Name	Execution Time (s)	Total Energy (J)	CPU Energy (J)	Memory Energy (J)	Energy/Time (J/s)
CMake	3 (5.5)	1 (8.0)	1 (8.0)	4 (4.2)	6 (10.2)
qmake	8 (8.0)	7 (16.7)	7 (16.7)	9 (7.0)	13 (16.7)
Qbs	9 (10.0)	9 (18.5)	9 (18.5)	10 (9.0)	12 (15.5)
NetBeans IDE	8 (8.0)	5 (13.0)	5 (13.0)	8 (6.5)	9 (13.0)
Code::Blocks	12 (12.0)	11 (22.0)	11 (22.0)	12 (12.0)	3 (8.0)
CLion	3 (5.5)	1 (8.0)	1 (8.0)	4 (4.2)	6 (10.2)
CodeLite	3 (5.5)	4 (12.5)	4 (12.5)	3 (4.0)	8 (11.5)
Eclipse CDT	2 (4.5)	5 (13.0)	5 (13.0)	2 (3.5)	2 (7.5)
KDevelop	3 (5.5)	1 (8.0)	1 (8.0)	4 (4.2)	6 (10.2)
Geany	11 (11.0)	12 (23.0)	12 (23.0)	10 (9.0)	5 (10.0)
Anjuta DevStudio	6 (7.2)	8 (17.8)	8 (17.8)	8 (6.5)	8 (11.5)
Qt Creator	7 (7.3)	6 (13.2)	6 (13.2)	7 (6.2)	10 (13.6)
DialogBlocks	5 (6.5)	5 (13.0)	5 (13.0)	5 (5.0)	11 (14.0)
Zinjal	8 (8.0)	2 (10.0)	2 (10.0)	6 (6.0)	4 (8.5)
GPS	4 (5.8)	3 (11.2)	3 (11.2)	5 (5.0)	7 (11.2)
Oracle Developer Studio	8 (8.0)	5 (13.0)	5 (13.0)	8 (6.5)	9 (13.0)
Sphere Engine	1 (3.0)	2 (10.0)	2 (10.0)	1 (2.0)	14 (22.0)
AWS Cloud9	10 (10.5)	10 (19.0)	10 (19.0)	11 (9.5)	1 (5.5)

Table 3: N-body tools ranked with 2 decimal points

Tool Name	Execution Time (s)	Total Energy (J)	CPU Energy (J)	Memory Energy (J)	Energy/Time (J/s)
CMake	3 (10.2)	1 (8.0)	1 (8.0)	3 (9.2)	5 (12.0)
qmake	9 (15.3)	7 (16.7)	7 (16.7)	9 (14.3)	13 (19.3)
Qbs	10 (18.0)	9 (18.5)	9 (18.5)	10 (17.0)	12 (18.0)
NetBeans IDE	8 (14.0)	5 (13.0)	5 (13.0)	6 (12.5)	9 (15.0)
Code::Blocks	13 (21.0)	11 (22.0)	11 (22.0)	13 (22.0)	3 (9.0)
CLion	3 (10.2)	1 (8.0)	1 (8.0)	3 (9.2)	5 (12.0)
CodeLite	5 (12.0)	4 (12.5)	4 (12.5)	5 (11.0)	7 (13.0)
Eclipse CDT	2 (9.0)	5 (13.0)	5 (13.0)	2 (8.5)	2 (8.5)
KDevelop	3 (10.2)	1 (8.0)	1 (8.0)	3 (9.2)	5 (12.0)
Geany	12 (20.0)	12 (23.0)	12 (23.0)	11 (19.0)	5 (12.0)
Anjuta DevStudio	7 (13.8)	8 (17.8)	8 (17.8)	8 (13.2)	8 (13.5)
Qt Creator	6 (13.7)	6 (13.2)	6 (13.2)	7 (12.7)	10 (15.8)
DialogBlocks	4 (11.5)	5 (13.0)	5 (13.0)	5 (11.0)	11 (16.0)
Zinjal	8 (14.0)	2 (10.0)	2 (10.0)	6 (12.5)	4 (10.0)
GPS	3 (10.2)	3 (11.2)	3 (11.2)	4 (10.0)	6 (12.8)
Oracle Developer Studio	8 (14.0)	5 (13.0)	5 (13.0)	6 (12.5)	9 (15.0)
Sphere Engine	1 (7.0)	2 (10.0)	2 (10.0)	1 (6.0)	14 (26.0)
AWS Cloud9	11 (19.5)	10 (19.0)	10 (19.0)	12 (19.5)	1 (6.5)

Table 4: N-body tools ranked with 3 decimal points