Tool Name	Execution Time (s)	Total Energy (J)	CPU Energy (J)	Memory Energy (J)	Energy/Time (J/s)
CMake	2 (2.2)	4 (5.5)	2 (4.8)	2 (2.2)	4 (1.5)
qmake	3 (2.3)	3 (5.3)	5 (5.3)	3 (2.3)	5 (1.7)
Qbs	6 (3.0)	6 (6.0)	7 (6.0)	6 (3.0)	1 (1.0)
NetBeans IDE	5 (2.5)	8 (7.0)	8 (6.5)	5 (2.5)	4 (1.5)
Code::Blocks	9 (5.0)	11 (10.0)	11 (9.0)	10 (5.0)	1 (1.0)
CLion	2 (2.2)	4 (5.5)	2 (4.8)	2 (2.2)	4 (1.5)
CodeLite	5 (2.5)	7 (6.5)	7 (6.0)	5 (2.5)	4 (1.5)
Eclipse CDT	6 (3.0)	4 (5.5)	3 (5.0)	5 (2.5)	4 (1.5)
KDevelop	2 (2.2)	4 (5.5)	2 (4.8)	2 (2.2)	4 (1.5)
Geany	9 (5.0)	8 (7.0)	9 (7.0)	8 (4.0)	1 (1.0)
Anjuta DevStudio	7 (4.0)	10 (8.5)	10 (8.2)	7 (3.5)	2 (1.2)
Qt Creator	4 (2.4)	5 (5.6)	4 (5.2)	4 (2.4)	3 (1.4)
DialogBlocks	5 (2.5)	9 (7.5)	9 (7.0)	5 (2.5)	4 (1.5)
ZinjaI	5 (2.5)	6 (6.0)	6 (5.5)	5 (2.5)	4 (1.5)
GPS	1 (2.0)	1 (4.2)	1 (4.0)	1 (2.0)	4 (1.5)
Oracle Developer Studio	5 (2.5)	8 (7.0)	8 (6.5)	5 (2.5)	4 (1.5)
Sphere Engine	1 (2.0)	2 (5.0)	3 (5.0)	1 (2.0)	6 (2.0)
AWS Cloud9	8 (4.5)	11 (10.0)	11 (9.0)	9 (4.5)	1 (1.0)

Table 1: K-nucleotide 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	3 (4.8)	3 (10.8)	3 (10.0)	3 (4.5)	9 (5.0)
qmake	4 (5.0)	5 (12.0)	4 (10.7)	4 (5.0)	8 (4.7)
Qbs	7 (6.0)	6 (13.0)	5 (12.0)	6 (6.0)	3 (3.5)
NetBeans IDE	6 (5.5)	8 (14.5)	7 (13.5)	4 (5.0)	6 (4.5)
Code::Blocks	9 (7.0)	13 (20.0)	11 (18.0)	10 (8.0)	2 (3.0)
CLion	3 (4.8)	3 (10.8)	3 (10.0)	3 (4.5)	9 (5.0)
CodeLite	6 (5.5)	7 (13.5)	6 (12.5)	4 (5.0)	5 (4.0)
Eclipse CDT	2 (4.5)	2 (9.5)	2 (9.0)	2 (4.0)	6 (4.5)
KDevelop	3 (4.8)	3 (10.8)	3 (10.0)	3 (4.5)	9 (5.0)
Geany	9 (7.0)	9 (15.0)	8 (14.0)	8 (7.0)	1 (1.0)
Anjuta DevStudio	8 (6.2)	11 (18.5)	10 (17.2)	7 (6.5)	4 (3.8)
Qt Creator	5 (5.1)	4 (11.7)	4 (10.7)	4 (5.0)	7 (4.6)
DialogBlocks	6 (5.5)	10 (17.5)	9 (16.5)	5 (5.5)	6 (4.5)
ZinjaI	6 (5.5)	6 (13.0)	5 (12.0)	4 (5.0)	5 (4.0)
GPS	1 (3.5)	1 (8.8)	1 (8.0)	1 (3.2)	9 (5.0)
Oracle Developer Studio	6 (5.5)	8 (14.5)	7 (13.5)	4 (5.0)	6 (4.5)
Sphere Engine	4 (5.0)	6 (13.0)	5 (12.0)	4 (5.0)	10 (6.0)
AWS Cloud9	9 (7.0)	12 (19.5)	11 (18.0)	9 (7.5)	2 (3.0)

Table 2: K-nucleotide 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	2 (9.2)	3 (10.8)	3 (10.8)	2 (8.5)	12 (13.8)
qmake	5 (11.0)	5 (12.3)	5 (12.3)	6 (10.3)	7 (10.7)
Qbs	8 (13.0)	8 (14.5)	7 (13.5)	9 (12.0)	3 (7.0)
NetBeans IDE	5 (11.0)	8 (14.5)	9 (14.5)	5 (10.0)	10 (12.0)
Code::Blocks	12 (19.0)	13 (21.0)	14 (21.0)	13 (17.0)	2 (6.0)
CLion	2 (9.2)	3 (10.8)	3 (10.8)	2 (8.5)	12 (13.8)
CodeLite	6 (11.5)	7 (14.0)	8 (14.0)	7 (10.5)	6 (10.0)
Eclipse CDT	3 (9.5)	2 (9.5)	2 (9.5)	3 (9.5)	9 (11.5)
KDevelop	2 (9.2)	3 (10.8)	3 (10.8)	2 (8.5)	12 (13.8)
Geany	10 (16.0)	9 (15.0)	10 (15.0)	12 (16.0)	1 (1.0)
Anjuta DevStudio	9 (15.8)	11 (19.8)	12 (20.2)	10 (14.0)	5 (9.5)
Qt Creator	4 (10.7)	4 (12.1)	4 (11.9)	4 (9.9)	8 (11.2)
DialogBlocks	7 (12.5)	10 (19.0)	11 (19.0)	8 (11.5)	10 (12.0)
ZinjaI	5 (11.0)	6 (13.0)	6 (13.0)	3 (9.5)	4 (9.0)
GPS	1 (7.8)	1 (9.0)	1 (9.0)	1 (7.0)	11 (12.8)
Oracle Developer Studio	5 (11.0)	8 (14.5)	9 (14.5)	5 (10.0)	10 (12.0)
Sphere Engine	5 (11.0)	6 (13.0)	6 (13.0)	5 (10.0)	13 (17.0)
AWS Cloud9	11 (16.5)	12 (20.5)	13 (20.5)	11 (15.0)	3 (7.0)

Table 3: K-nucleotide 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	2 (9.8)	3 (10.8)	3 (10.8)	2 (10.2)	12 (16.5)
qmake	5 (12.0)	5 (12.3)	5 (12.3)	6 (13.0)	7 (12.3)
Qbs	7 (14.5)	8 (14.5)	7 (13.5)	7 (15.0)	3 (8.0)
NetBeans IDE	5 (12.0)	8 (14.5)	9 (14.5)	6 (13.0)	9 (14.0)
Code::Blocks	11 (22.0)	13 (21.0)	14 (21.0)	11 (23.0)	2 (6.0)
CLion	2 (9.8)	3 (10.8)	3 (10.8)	2 (10.2)	12 (16.5)
CodeLite	5 (12.0)	7 (14.0)	8 (14.0)	3 (12.0)	6 (11.0)
Eclipse CDT	3 (10.5)	2 (9.5)	2 (9.5)	3 (12.0)	9 (14.0)
KDevelop	2 (9.8)	3 (10.8)	3 (10.8)	2 (10.2)	12 (16.5)
Geany	10 (19.0)	9 (15.0)	10 (15.0)	10 (20.0)	1 (1.0)
Anjuta DevStudio	8 (18.2)	11 (19.8)	12 (20.2)	8 (18.8)	5 (10.8)
Qt Creator	4 (11.6)	4 (12.1)	4 (11.9)	4 (12.2)	8 (13.2)
DialogBlocks	6 (14.0)	10 (19.0)	11 (19.0)	7 (15.0)	10 (15.0)
ZinjaI	5 (12.0)	6 (13.0)	6 (13.0)	5 (12.5)	4 (10.5)
GPS	1 (8.8)	1 (9.0)	1 (9.0)	1 (9.2)	11 (15.5)
Oracle Developer Studio	5 (12.0)	8 (14.5)	9 (14.5)	6 (13.0)	9 (14.0)
Sphere Engine	5 (12.0)	6 (13.0)	6 (13.0)	6 (13.0)	13 (22.0)
AWS Cloud9	9 (18.5)	12 (20.5)	13 (20.5)	9 (19.5)	3 (8.0)

Table 4: K-nucleotide tools ranked with 3 decimal points