Tool Name	Execution Time (s)	Total Energy (J)	CPU Energy (J)	Memory Energy (J)	Energy/Time (J/s)
CMake	1 (2.5)	2 (3.8)	2 (3.5)	1 (2.0)	2 (1.8)
qmake	4 (3.3)	6 (5.3)	6 (5.0)	3 (2.3)	4 (2.0)
Qbs	5 (3.5)	9 (6.5)	8 (6.0)	4 (2.5)	4 (2.0)
NetBeans IDE	5 (3.5)	8 (6.0)	7 (5.5)	4 (2.5)	4 (2.0)
Code::Blocks	7 (4.0)	11 (8.0)	10 (7.0)	6 (3.0)	4 (2.0)
CLion	1 (2.5)	2 (3.8)	2 (3.5)	1 (2.0)	2 (1.8)
CodeLite	5 (3.5)	7 (5.5)	6 (5.0)	4 (2.5)	4 (2.0)
Eclipse CDT	1 (2.5)	5 (5.0)	4 (4.5)	1 (2.0)	1 (1.5)
KDevelop	1 (2.5)	2 (3.8)	2 (3.5)	1 (2.0)	2 (1.8)
Geany	7 (4.0)	8 (6.0)	8 (6.0)	6 (3.0)	4 (2.0)
Anjuta DevStudio	6 (3.8)	10 (7.0)	9 (6.2)	5 (2.8)	4 (2.0)
Qt Creator	3 (3.0)	4 (4.9)	5 (4.6)	2 (2.2)	3 (1.9)
DialogBlocks	5 (3.5)	7 (5.5)	7 (5.5)	4 (2.5)	4 (2.0)
ZinjaI	5 (3.5)	5 (5.0)	4 (4.5)	4 (2.5)	4 (2.0)
GPS	2 (2.8)	3 (4.2)	3 (4.0)	1 (2.0)	2 (1.8)
Oracle Developer Studio	5 (3.5)	8 (6.0)	7 (5.5)	4 (2.5)	4 (2.0)
Sphere Engine	3 (3.0)	1 (3.0)	1 (3.0)	1 (2.0)	4 (2.0)
AWS Cloud9	7 (4.0)	12 (8.5)	11 (7.5)	6 (3.0)	4 (2.0)

Table 1: mandelbrot 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	1 (2.8)	2 (8.0)	2 (8.0)	1 (2.5)	4 (3.0)
qmake	6 (4.3)	8 (11.3)	8 (11.3)	4 (3.3)	4 (3.0)
Qbs	7 (4.5)	11 (14.5)	11 (14.5)	5 (3.5)	8 (4.0)
NetBeans IDE	5 (4.0)	10 (13.0)	10 (13.0)	5 (3.5)	6 (3.5)
Code::Blocks	9 (6.0)	13 (17.0)	13 (17.0)	7 (4.0)	8 (4.0)
CLion	1 (2.8)	2 (8.0)	2 (8.0)	1 (2.5)	4 (3.0)
CodeLite	7 (4.5)	7 (11.0)	7 (11.0)	5 (3.5)	4 (3.0)
Eclipse CDT	3 (3.5)	5 (10.5)	5 (10.5)	1 (2.5)	2 (2.5)
KDevelop	1 (2.8)	2 (8.0)	2 (8.0)	1 (2.5)	4 (3.0)
Geany	9 (6.0)	9 (12.0)	9 (12.0)	7 (4.0)	4 (3.0)
Anjuta DevStudio	8 (5.0)	12 (15.0)	12 (15.0)	6 (3.8)	7 (3.8)
Qt Creator	4 (3.7)	6 (10.6)	6 (10.6)	3 (3.0)	5 (3.2)
DialogBlocks	7 (4.5)	10 (13.0)	10 (13.0)	5 (3.5)	4 (3.0)
ZinjaI	7 (4.5)	4 (9.5)	4 (9.5)	5 (3.5)	2 (2.5)
GPS	3 (3.5)	3 (9.2)	3 (9.2)	2 (2.8)	3 (2.8)
Oracle Developer Studio	5 (4.0)	10 (13.0)	10 (13.0)	5 (3.5)	6 (3.5)
Sphere Engine	2 (3.0)	1 (5.0)	1 (5.0)	3 (3.0)	1 (2.0)
AWS Cloud9	9 (6.0)	14 (18.5)	14 (18.5)	7 (4.0)	8 (4.0)

Table 2: mandelbrot 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 (4.5)	2 (9.5)	2 (9.5)	2 (3.5)	4 (9.5)
qmake	8 (8.0)	8 (13.7)	8 (13.7)	7 (6.3)	6 (10.3)
Qbs	9 (8.5)	11 (17.0)	11 (17.0)	8 (6.5)	10 (13.5)
NetBeans IDE	7 (7.5)	10 (15.5)	10 (15.5)	6 (6.0)	8 (11.0)
Code::Blocks	11 (10.0)	13 (20.0)	13 (20.0)	10 (8.0)	12 (16.0)
CLion	2 (4.5)	2 (9.5)	2 (9.5)	2 (3.5)	4 (9.5)
CodeLite	6 (7.0)	7 (13.5)	7 (13.5)	5 (5.5)	8 (11.0)
Eclipse CDT	3 (5.5)	5 (12.5)	5 (12.5)	3 (4.5)	4 (9.5)
KDevelop	2 (4.5)	2 (9.5)	2 (9.5)	2 (3.5)	4 (9.5)
Geany	11 (10.0)	9 (15.0)	9 (15.0)	10 (8.0)	5 (10.0)
Anjuta DevStudio	10 (8.8)	12 (17.8)	12 (17.8)	9 (7.2)	11 (13.8)
Qt Creator	5 (6.6)	6 (12.6)	6 (12.6)	4 (5.1)	7 (10.7)
DialogBlocks	6 (7.0)	10 (15.5)	10 (15.5)	5 (5.5)	9 (12.5)
ZinjaI	6 (7.0)	4 (11.5)	4 (11.5)	5 (5.5)	2 (8.0)
GPS	4 (5.8)	3 (10.8)	3 (10.8)	3 (4.5)	3 (9.2)
Oracle Developer Studio	7 (7.5)	10 (15.5)	10 (15.5)	6 (6.0)	8 (11.0)
Sphere Engine	1 (4.0)	1 (5.0)	1 (5.0)	1 (3.0)	1 (4.0)
AWS Cloud9	11 (10.0)	14 (22.0)	14 (22.0)	10 (8.0)	13 (17.0)

Table 3: mandelbrot 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 (7.8)	2 (9.5)	2 (9.5)	2 (6.8)	5 (11.8)
qmake	8 (13.7)	8 (13.7)	8 (13.7)	6 (11.0)	6 (12.0)
Qbs	9 (14.0)	11 (17.0)	11 (17.0)	7 (12.0)	12 (17.0)
NetBeans IDE	6 (13.0)	10 (15.5)	10 (15.5)	6 (11.0)	9 (14.5)
Code::Blocks	12 (18.0)	13 (20.0)	13 (20.0)	10 (16.0)	13 (19.0)
CLion	2 (7.8)	2 (9.5)	2 (9.5)	2 (6.8)	5 (11.8)
CodeLite	6 (13.0)	7 (13.5)	7 (13.5)	7 (12.0)	7 (12.5)
Eclipse CDT	4 (11.0)	5 (12.5)	5 (12.5)	5 (10.0)	4 (11.5)
KDevelop	2 (7.8)	2 (9.5)	2 (9.5)	2 (6.8)	5 (11.8)
Geany	14 (20.0)	9 (15.0)	9 (15.0)	12 (18.0)	6 (12.0)
Anjuta DevStudio	11 (16.8)	12 (17.8)	12 (17.8)	9 (14.8)	11 (16.8)
Qt Creator	5 (11.1)	6 (12.6)	6 (12.6)	4 (9.3)	8 (13.0)
DialogBlocks	7 (13.5)	10 (15.5)	10 (15.5)	8 (12.5)	10 (15.0)
ZinjaI	10 (14.5)	4 (11.5)	4 (11.5)	8 (12.5)	2 (9.5)
GPS	3 (10.5)	3 (10.8)	3 (10.8)	3 (9.0)	3 (10.8)
Oracle Developer Studio	6 (13.0)	10 (15.5)	10 (15.5)	6 (11.0)	9 (14.5)
Sphere Engine	1 (5.0)	1 (5.0)	1 (5.0)	1 (5.0)	1 (4.0)
AWS Cloud9	13 (18.5)	14 (22.0)	14 (22.0)	11 (16.5)	14 (20.5)

Table 4: mandelbrot tools ranked with 3 decimal points