

In Table 1 we characterize the selected programs regarding some of their features. The parameters considered are: (PL)programming language; the (IF)input and (OF)output files; (CC)code complexity (low, medium or high); and the (ED)amount of external dependencies (none, few, several or lot). Average compile and execution times(ACT, AET) are also included just to figure out a quantitative description of their size/complexity.

Program	PL	IF	OF	CC	ED	ACT (s)	AET (s)
MMC	C	None	None	Low	None	0.17	26.16
Grades	C (Flex and Yacc)	Txt	Html	Low	Few	0.23	32.84
Bzip	C	Wav	Bz2	Medium	None	1.47	23.41
Bzip2	C	Wav	Bz2	Medium	Several	1.97	23.38
Oggenc	C	Wav	Ogg	High	None	3.83	22.91
Pbrt	C++	Pbrt	Exr	High	Lot	43.08	19.42
Matmul	Go	None	None	Low	None	0.13	15.05
PGo	Go	None	None	Low	None	0.15	13.06
Sudoku	Go	Txt	None	Medium	None	0.24	24.43
Matmulobjc	Obj-C	None	None	Low	None	0.19	3.88
Miscellany	Obj-C	None	None	Medium	None	0.40	9.47
Sorting	Obj-C	None	None	Medium	Few	0.26	35.62

Table 1: Some features of the measured programs.

A brief description of each one of the subject programs follows:

MMC: Multiplication of matrices with size 1024x1024 using 6 different methods.

GRADES: Generates the final grades of the students in a course from their marks.

BZIP AND BZIP2: File compression tools (replacing the input file).

OGGENC: Perform file format conversion (creating a new file).

PBRT: Executes the rendering of images using ray tracing.

MATMUL: Multiplication of two matrices with size 2000x2000.

PGO: Modular random level generator (roguelike type).

SUDOKU: Solves 20 extremely hard Sudokus repeated 1024 times;

MATMULOBJC: Multiplication of matrices with size 800x800 using 6 different methods.

MISCELLANY: Collection (more than 1000 lines) of practical exercises.

SORTING: Applies 6 of the best known sorting algorithm to an array of 8000 positions.