Homework 1

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Compilers

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3) Different timing results are given in the table 1. However, due to lack of space, *Challenge* part is given in different table 2.

Files	gcc				icc				llc			
	-O0	-O1	-O2	-O3	-O0	-O1	-O2	-O3	-O0	-O1	-O2	-O3
distbench.c	0.013	0.0111	0.0128	0.011	0.0124	0.011	0.0125	0.0111	0.0127	0.0114	0.0129	0.0113
fftbench.c	0.0129	0.0113	0.0129	0.0111	0.0125	0.0111	0.0125	0.011	0.0128	0.0113	0.0127	0.0112
linbench.c	0.0128	0.0114	0.0129	0.0113	0.0125	0.011	0.0124	0.0109	0.0127	0.0113	0.0128	0.0113
mat1bench.c	0.0129	0.0113	0.0129	0.0112	0.0126	0.0109	0.0125	0.011	0.0128	0.0113	0.0128	0.0113
almabench.c	0.0128	0.0113	0.0129	0.0111	0.0125	0.011	0.0124	0.0109	0.0128	0.0113	0.0127	0.0112
evobench.c	0.0129	0.0114	0.0133	0.0113	0.0124	0.011	0.0124	0.0111	0.0127	0.0118	0.0128	0.0113
huffbench.c	0.0128	0.0114	0.0129	0.0116	0.0126	0.0111	0.0124	0.011	0.0128	0.0113	0.0127	0.0112
lpbench.c	0.0128	0.0113	0.0128	0.0112	0.0126	0.0109	0.0125	0.0109	0.013	0.0116	0.013	0.0114
treebench.c	0.013	0.0115	0.0133	0.0113	0.0127	0.0112	0.0126	0.0111	0.0128	0.0113	0.0128	0.0113

Table 1: Time taken for execution for different files with different flags

File	Best (Compiler, Optimization Flag) combination
distbench.c	(gcc, O3) and (icc, O1)
fftbench.c	(icc, O3)
linbench.c	(icc, O3)
mat1bench.c	(icc, O1)
almabench.c	(icc, O3)
evobench.c	(icc, O1)
huffbench.c	(icc, O3)
lpbench.c	(icc, O3)
treebench.c	(icc, O3)

Table 2: Best combination of compiler and optimization flag for different files evaluated by performance