output_string ()

ENTRY

[100%]

FREQ:10000
<bb 2>:
__printf_chk (1, "%s", buffer_3(D));
write_to_file.30_1 = write_to_file;
if (write_to_file.30_1 != 0)
goto <bb 3>; [36.64%]
else
goto <bb 4>; [63.36%]

[36%]

FREQ:3664
<bb 3>:
global_ofile.31_7 = global_ofile;
__builtin_fputs (buffer_3(D), global_ofile.31_7);

[100%]

[63%]

FREQ:10000
<bb 4>:
return;

[100%]

EXIT

main ()

ENTRY

[100%]

FREQ:909
<bb 2>:
global_min_ticks = 60;
global_min_seconds = 5;
global_allstats = 0;
global_custrun = 0;
global_align = 8;
write_to_file = 0;
mem_array_cnts = 0;
goto <bb 4>; [100.00%]

EXIT

[100%]

loop 1

FREQ:19000
<bb 4>
# i_41 = PHI <0(2), i_148(3)>
if (i_41 <= 9);
goto <bb 3>; [90.91%]
else
goto <bb 5>; [9.09%]

[9%]

[90%]

[100%]

FREQ:909
<bb 3>:
global_numsortstruct.request_secs = 5;
global_strsortstruct.request_secs = 5;
global_bitopstruct.request_secs = 5;
global_emfloatstruct.request_secs = 5;
global_fourierstruct.request_secs = 5;
global_assignstruct.request_secs = 5;
global_ideastruct.request_secs = 5;
global_huffstruct.request_secs = 5;
global_neetstruct.request_secs = 5;
global_lustruct.request_secs = 5;
global_numsortstruct.adjust = 0;
global_numsortstruct.arraysize = 8111;
global_strsortstruct.adjust = 0;
global_strsortstruct.arraysize = 8111;
global_bitopstruct.adjust = 0;
global_bitopstruct.bitfieldarraysize = 16384;
global_emfloatstruct.adjust = 0;
global_emfloatstruct.arraysize = 3000;
global_fourierstruct.adjust = 0;
global_assignstruct.adjust = 0;
global_ideastruct.adjust = 0;
global_ideastruct.arraysize = 4000;
global_huffstruct.adjust = 0;
global_huffstruct.arraysize = 5600;
global_neetstruct.adjust = 0;
global_lustruct.adjust = 0;
if (argc_00(D) == 2)
goto <bb 6>; [20.24%]
else
goto <bb 7>; [79.76%]

[20%]

[79%]

FREQ:909[0]
<bb 3>:
tests_to_do[i_41] = 1;
i_148 = i_41 + 1;

FREQ:184
<bb 6>:
_1 = MEM[(char * *)argv_91(D) + 8B];
_149 = strtol (_1, 0B, 10);
_150 = (int) _149;
testnum = _150;

[100%]

FREQ:909
<bb 7>:
output_string ("\nBYTEmark* Native Mode Benchmark ver. 2 (10/95)\n");
output_string ("Index-split by Andrew D. Balsa (11/97)\n");
output_string ("Linux/Unix* port by Uwe F. Mayer (12/96,11/97)\n");
global_allstats.0_2 = global_allstats;
if (global_allstats.0_2 != 0)
goto <bb 8>; [33.00%]
else
goto <bb 9>; [67.00%]

[33%]

[67%]

FREQ:300
<bb 8>:
output_string ("\n");
output_string ("========== ALL STATISTICS ==========\n");
time (&time_and_date);
loctime_100 = localtime (&time_and_date);
_3 = asctime (loctime_100);
__builtin___sprintf_chk (&buffer, 1, 1024, "***Date and time of benchmark run: %s", _3);
output_string (&buffer);
__builtin___sprintf_chk (&buffer, 1, 1024, "***Sizeof: char:%u short:%u int:%u long:%u ull:%u u16:%u u32:%u\n\n", 1, 2, 4, 8, 1, 2, 4, 4);
output_string (&buffer);
__builtin_memcpy (&buffer, "***System used for compilation:\n", 32);
output_string (&buffer);
__builtin_memcpy (&buffer, "***Linux elvenado 4.15.0-112-generic #113-Ubuntu SMP Thu Jul 9 23:41:39 UTC 2020 \n", 82);
output_string (&buffer);
__builtin_memcpy (&buffer, "***C compiler: gcc version 7.5.0 (Ubuntu 7.5.0-3ubuntu1~18.04) \n", 64);
output_string (&buffer);
__builtin_memcpy (&buffer, "***libc: libc-2.27.so\n", 22);
output_string (&buffer);
__builtin_memcpy (&buffer, "***Date of compilation: Mon 24 Aug 10:41:27 BST 2020\n", 53);
output_string (&buffer);
output_string ("==========\n\n");

[100%]

FREQ:909
<bb 9>:
output_string ("\nTEST : Iterations/sec. : Old Index : New Index\n");
output_string ("   : Pentium 90* : AMD K6/233*\n");
output_string ("--------------------------------\n");
i_113 = testnum;
goto <bb 60>; [100.00%]

[100%]

loop 2

FREQ:9060
<bb 60>:
# i_42 = PHI <i_113(9), i_146(59)>
# ix_memindex_45 = PHI <1.0e+0(9), ix_memindex_44(59)>
# ix_intindex_48 = PHI <1.0e+0(9), ix_intindex_47(59)>
# ix_fpindex_51 = PHI <1.0e+0(9), ix_fpindex_50(59)>
# intindex_54 = PHI <1.0e+0(9), intindex_53(59)>
# fpindex_57 = PHI <1.0e+0(9), fpindex_56(59)>
testnum.16_32 = testnum;
if (testnum.16_32 == i_42)
goto <bb 61>; [85.00%]
else
goto <bb 61>; [15.00%]

[15%]

[85%]

FREQ:909
<bb 61>:
# ix_memindex_61 = PHI <ix_memindex_45(60)>
# ix_intindex_134 = PHI <ix_intindex_48(60)>
# ix_fpindex_154 = PHI <ix_fpindex_51(60)>
# intindex_152 = PHI <intindex_54(60)>
# fpindex_151 = PHI <fpindex_57(60)>
global_custrun.17_33 = global_custrun;
if (global_custrun.17_33 == 0)
goto <bb 62>; [33.00%]
else
goto <bb 63>; [67.00%]

[33%]

[67%]

FREQ:3151
<bb 10>:
_4 = tests_to_do[i_42];
if (_4 != 0)
goto <bb 11>; [33.00%]
else
goto <bb 59>; [67.00%]

[33%]

[67%]

FREQ:300
<bb 62>:
output_string ("\n==========ORIGINAL BYTEMARK RESULTS==========\n");
_34 = pow (intindex_152, 1.428570000000001175237684947205707430839538537421875e-1);
__builtin___sprintf_chk (&buffer, 1, 1024, "INTEGER INDEX   : %.3f\n", _34);
output_string (&buffer);
_35 = pow (fpindex_151, 3.3333000000000011517008740847813896834850311279296875e-1);
__builtin___sprintf_chk (&buffer, 1, 1024, "FLOATING-POINT INDEX: %.3f\n", _35);
output_string (&buffer);
output_string ("Baseline (MSDOS*)   : Pentium* 90, 256 KB L2-cache, Watcom* compiler 10.0\n");
output_string ("\n==========LINUX DATA BELOW==========\n\n");
global_ofile.18_36 = global_ofile;
write_to_file.19_37 = write_to_file;
hardware (write_to_file.19_37, global_ofile.18_36);
__builtin_memcpy (&buffer, "C compiler   : gcc version 7.5.0 (Ubuntu 7.5.0-3ubuntu1~18.04) \n", 72);
output_string (&buffer);
__builtin_memcpy (&buffer, "libc   : libc-2.27.so\n", 36);
output_string (&buffer);
_38 = pow (ix_memindex_61, 3.3333333329999997873827055627771187573673349942382812 5e-1);
__builtin___sprintf_chk (&buffer, 1, 1024, "MEMORY INDEX   : %.3f\n", _38);
output_string (&buffer);
_39 = pow (ix_intindex_134, 2.5e-1);
__builtin___sprintf_chk (&buffer, 1, 1024, "INTEGER INDEX   : %.3f\n", _39);
output_string (&buffer);
_40 = pow (ix_fpindex_154, 3.3333333329999997873827055627771187573673349942382812 5e-1);
__builtin___sprintf_chk (&buffer, 1, 1024, "FLOATING-POINT INDEX: %.3f\n", _40);
output_string (&buffer);
output_string ("Baseline (LINUX)   : AMD K6/233*, 512 KB L2-cache, gcc 2.7.2.3, libc-5.4.38\n");
output_string ("* Trademarks are property of their respective holder.\n");

[100%]

FREQ:909
<bb 63>:
exit (0);

FREQ:1700
<bb 11>:
_5 = &testnum[i_42];
__builtin___sprintf_chk (&buffer, 1, 1024, "%s   :", _5);
__printf_chk (1, "%s", &buffer);
write_to_file.30_190 = write_to_file;
if (write_to_file.30_190 != 0)
goto <bb 12>; [36.64%]
else
goto <bb 13>; [63.36%]

[36%]

[63%]

FREQ:623
<bb 12>:
global_ofile.31_191 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_191);

[100%]

FREQ:1700
<bb 13>:
_153 = funcpointer[i_42];
_153 ();
_6 = ix_hindex[i_42];
_7 = hmean_187(D) / _6;
_8 = hindex[i_42];
_9 = hmean_187(D) / _8;
__builtin___sprintf_chk (&buffer, 1, 1024, " %15.5g : %9.2f : %9.2f\n", hmean_187(D), _9, _7);
__printf_chk (1, "%s", &buffer);
write_to_file.30_189 = write_to_file;
if (write_to_file.30_189 != 0)
goto <bb 14>; [36.64%]
else
goto <bb 15>; [63.36%]

[36%]

[63%]

FREQ:623
<bb 14>:
global_ofile.31_192 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_192);

[100%]

FREQ:1700
<bb 15>:
_10 = i_42 == 4;
_11 = i_42 == 8;
_12 = _10 | _11;
if (_12 != 0)
goto <bb 17>; [50.00%]
else
goto <bb 16>; [50.00%]

[50%]

FREQ:850
<bb 16>:
if (i_42 == 9)
goto <bb 17>; [34.00%]
else
goto <bb 18>; [66.00%]

[66%]

[34%]

FREQ:561
<bb 18>:
_17 = hindex[i_42];
_18 = hmean_187(D) / _17;
intindex_136 = _18 * intindex_54;
_19 = i_42 == 0;
_20 = i_42 == 3;
_21 = _19 | _20;
if (_21 != 0)
goto <bb 20>; [50.00%]
else
goto <bb 19>; [50.00%]

[50%]

[50%]

FREQ:280
<bb 19>:
i_7_22 = (unsigned int) i_42;
_23 = i_7_22 * 429496729;
if (_23 <= 1)
goto <bb 20>; [36.00%]
else
goto <bb 21>; [64.00%]

[36%]

[64%]

FREQ:1139
<bb 17>:
_13 = hindex[i_42];
_14 = hmean_187(D) / _13;
fpindex_139 = _14 * fpindex_57;
_15 = ix_hindex[i_42];
_16 = hmean_187(D) / _15;
ix_fpindex_140 = _16 * ix_fpindex_51;
goto <bb 22>; [100.00%]

[100%]

FREQ:381
<bb 20>:
_24 = ix_hindex[i_42];
_25 = hmean_187(D) / _24;
ix_intindex_138 = _25 * ix_intindex_48;
goto <bb 22>; [100.00%]

[100%]

FREQ:179
<bb 21>:
_26 = ix_hindex[i_42];
_27 = hmean_187(D) / _26;
ix_memindex_137 = _27 * ix_memindex_45;

[100%]

FREQ:1700
<bb 22>:
# ix_memindex_43 = PHI <ix_memindex_45(17), ix_memindex_45(20), ix_memindex_137(21)>
# ix_intindex_46 = PHI <ix_intindex_48(17), ix_intindex_138(20), ix_intindex_48(21)>
# ix_fpindex_49 = PHI <ix_fpindex_140(17), ix_fpindex_51(20), ix_fpindex_51(21)>
# intindex_52 = PHI <intindex_54(17), intindex_136(20), intindex_136(21)>
# fpindex_55 = PHI <fpindex_139(17), fpindex_57(20), fpindex_57(21)>
global_allstats.10_28 = global_allstats;
if (global_allstats.10_28 != 0)
goto <bb 23>; [33.00%]
else
goto <bb 59>; [67.00%]

[33%]

[67%]

FREQ:561
<bb 23>:
__builtin___sprintf_chk (&buffer, 1, 1024, " Absolute standard deviation: %g\n", bstdev_188(D));
output_string (&buffer);
if (hmean_187(D) > 1.0000000000000000199918998926028836196477607885341594201 8e-100)
goto <bb 24>; [33.00%]
else
goto <bb 25>; [67.00%]

[33%]

[67%]

FREQ:185
<bb 24>:
_29 = bstdev_188(D) * 1.0e+2;
_30 = _29 / hmean_187(D);
__builtin___sprintf_chk (&buffer, 1, 1024, " Relative standard deviation: %g %%\n", _30);
output_string (&buffer);

[100%]

FREQ:561
<bb 25>:
__builtin___sprintf_chk (&buffer, 1, 1024, " Number of runs: %d\n", 5);
output_string (&buffer);
switch (i_42) <default: <L139> [9.09%], case 0: <L129> [9.09%], case 1: <L130> [9.09%], case 2: <L131> [9.09%], case 3: <L132> [9.09%], case 4: <L133> [9.09%], case 5: <L34> [9.09%], case 6: <L35> [9.09%], case 7: <L136> [9.09%], case 8: <L137> [9.09%], case 9: <L38> [9.09%]>

[9%]

FREQ:51
<bb 26>:
<L29> [0.51%]
_193 = global_numsortstruct.numarrays;
_194 = (int) _193;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of arrays: %d\n", _194);
__printf_chk (1, "%s", &buffer);
write_to_file.30_212 = write_to_file;
if (write_to_file.30_212 != 0)
goto <bb 27>; [36.64%]
else
goto <bb 28>; [63.36%]

[36%]

[63%]

FREQ:51
<bb 30>:
<L30> [0.51%]
_196 = global_strsortstruct.numarrays;
_197 = (int) _196;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of arrays: %d\n", _197);
__printf_chk (1, "%s", &buffer);
write_to_file.30_216 = write_to_file;
if (write_to_file.30_216 != 0)
goto <bb 31>; [36.64%]
else
goto <bb 32>; [63.36%]

[36%]

[63%]

FREQ:51
<bb 34>:
<L31> [0.51%]
_199 = global_bitopstruct.bitoparraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Operations array size: %d\n", _199);
__printf_chk (1, "%s", &buffer);
write_to_file.30_220 = write_to_file;
if (write_to_file.30_220 != 0)
goto <bb 35>; [36.64%]
else
goto <bb 36>; [63.36%]

[36%]

[63%]

FREQ:51
<bb 38>:
<L32> [0.51%]
_201 = global_emfloatstruct.loops;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of loops: %d\n", _201);
__printf_chk (1, "%s", &buffer);
write_to_file.30_224 = write_to_file;
if (write_to_file.30_224 != 0)
goto <bb 39>; [36.64%]
else
goto <bb 40>; [63.36%]

[36%]

[63%]

FREQ:51
<bb 46>:
<L35> [0.51%]
_205 = global_ideastruct.arraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Array size: %d\n", _205);
__printf_chk (1, "%s", &buffer);
write_to_file.30_232 = write_to_file;
if (write_to_file.30_232 != 0)
goto <bb 47>; [36.64%]
else
goto <bb 48>; [63.36%]

[36%]

[63%]

FREQ:51
<bb 50>:
<L36> [0.51%]
_207 = global_huffstruct.arraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Array size: %d\n", _207);
__printf_chk (1, "%s", &buffer);
write_to_file.30_236 = write_to_file;
if (write_to_file.30_236 != 0)
goto <bb 51>; [36.64%]
else
goto <bb 52>; [63.36%]

[36%]

[63%]

FREQ:19
<bb 27>:
global_ofile.31_213 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_213);

[100%]

FREQ:19
<bb 31>:
global_ofile.31_217 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_217);

[100%]

FREQ:19
<bb 35>:
global_ofile.31_221 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_221);

[100%]

FREQ:19
<bb 39>:
global_ofile.31_225 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_225);

[100%]

FREQ:19
<bb 47>:
global_ofile.31_233 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_233);

[100%]

FREQ:19
<bb 51>:
global_ofile.31_237 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_237);

[100%]

FREQ:51
<bb 28>:
_195 = global_numsortstruct.arraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Array size: %d\n", _195);
__printf_chk (1, "%s", &buffer);
write_to_file.30_211 = write_to_file;
if (write_to_file.30_211 != 0)
goto <bb 29>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 32>:
_198 = global_strsortstruct.arraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Array size: %d\n", _198);
__printf_chk (1, "%s", &buffer);
write_to_file.30_215 = write_to_file;
if (write_to_file.30_215 != 0)
goto <bb 33>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 36>:
_200 = global_bitopstruct.bitfieldarraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Bitfield array size: %d\n", _200);
__printf_chk (1, "%s", &buffer);
write_to_file.30_219 = write_to_file;
if (write_to_file.30_219 != 0)
goto <bb 37>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 40>:
_202 = global_emfloatstruct.arraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Array size: %d\n", _202);
__printf_chk (1, "%s", &buffer);
write_to_file.30_223 = write_to_file;
if (write_to_file.30_223 != 0)
goto <bb 41>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 42>:
<L133> [0.51%]
_203 = global_fourierstruct.arraysize;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of coefficients: %d\n", _203);
__printf_chk (1, "%s", &buffer);
write_to_file.30_227 = write_to_file;
if (write_to_file.30_227 != 0)
goto <bb 43>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 44>:
<L134> [0.51%]
_204 = global_assignstruct.numarrays;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of arrays: %d\n", _204);
__printf_chk (1, "%s", &buffer);
write_to_file.30_229 = write_to_file;
if (write_to_file.30_229 != 0)
goto <bb 45>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 48>:
_206 = global_ideastruct.loops;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of loops: %d\n", _206);
__printf_chk (1, "%s", &buffer);
write_to_file.30_231 = write_to_file;
if (write_to_file.30_231 != 0)
goto <bb 49>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 52>:
_208 = global_huffstruct.loops;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of loops: %d\n", _208);
__printf_chk (1, "%s", &buffer);
write_to_file.30_235 = write_to_file;
if (write_to_file.30_235 != 0)
goto <bb 53>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 54>:
<L137> [0.51%]
_209 = global_neetstruct.loops;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of loops: %d\n", _209);
__printf_chk (1, "%s", &buffer);
write_to_file.30_239 = write_to_file;
if (write_to_file.30_239 != 0)
goto <bb 55>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:51
<bb 56>:
<L138> [0.51%]
_210 = global_lustruct.numarrays;
__builtin___sprintf_chk (&buffer, 1, 80, " Number of arrays: %d\n", _210);
__printf_chk (1, "%s", &buffer);
write_to_file.30_241 = write_to_file;
if (write_to_file.30_241 != 0)
goto <bb 57>; [36.64%]
else
goto <bb 58> (<L139>); [63.36%]

[36%]

[63%]

FREQ:19
<bb 29>:
global_ofile.31_214 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_214);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 33>:
global_ofile.31_218 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_218);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 37>:
global_ofile.31_222 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_222);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 41>:
global_ofile.31_226 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_226);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 43>:
global_ofile.31_228 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_228);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 45>:
global_ofile.31_230 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_230);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 49>:
global_ofile.31_234 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_234);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 53>:
global_ofile.31_238 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_238);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 55>:
global_ofile.31_240 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_240);
goto <bb 58> (<L139>); [100.00%]

[100%]

FREQ:19
<bb 57>:
global_ofile.31_242 = global_ofile;
__builtin_fputs (&buffer, global_ofile.31_242);

[100%]

FREQ:561
<bb 58>:
<L139> [5.61%]
buffer = {v} {CLOBBER};
_31 = ftestnamed(i_42);
__builtin___sprintf_chk (&buffer, 1, 1024, "Done with %s\n\n", _31);
output_string (&buffer);

[100%]

FREQ:5151
<bb 59>:
# ix_memindex_44 = PHI <ix_memindex_45(10), ix_memindex_43(22), ix_memindex_43(58)>
# ix_intindex_47 = PHI <ix_intindex_48(10), ix_intindex_46(22), ix_intindex_46(58)>
# ix_fpindex_50 = PHI <ix_fpindex_51(10), ix_fpindex_49(22), ix_fpindex_49(58)>
# intindex_53 = PHI <intindex_54(10), intindex_52(22), intindex_52(58)>
# fpindex_56 = PHI <fpindex_57(10), fpindex_55(22), fpindex_55(58)>
i_146 = i_42 + 1;