```
FREQ:3142
<bb 2>:
os_command = "uname -s -r";
pipe_22 = popen (&os_command, "r");
if (pipe_22 == 0B)
  goto <bb 3>; [30.00%]
else
  goto <bb 4>; [70.00%]

FREQ:2199
<bb 4>:
_25 = __fgets_alias (&os, 1024, pipe_22);
if (_25 == 0B)
  goto <bb 5>; [30.00%]
else
  goto <bb 6>; [70.00%]

FREQ:660
<bb 5>:
MEM[(char *)&os] = 0;

FREQ:2199
<bb 6>:
pclose (pipe_22);
_27 = MEM[(const char *)&os];
if (_27 != 0)
  goto <bb 7>; [52.35%]
else
  goto <bb 9>; [47.65%]

FREQ:1151
<bb 7>:
_28 = strlen (&os);
_29 = _28 + 18446744073709551615;
_30 = &os + _29;
_31 = *_30;
if (_31 == 10)
  goto <bb 8>; [37.68%]
else
  goto <bb 9>; [62.32%]

FREQ:434
<bb 8>:
*_30 = 0;

FREQ:943
<bb 3>:
MEM[(char *)&os] = 0;
goto <bb 9>; [100.00%]

FREQ:3142
<bb 9>:
_1 = strstr (&os, "Linux");
if (_1 != 0B)
  goto <bb 10>; [49.47%]
else
  goto <bb 81>; [50.53%]

FREQ:1554
<bb 10>:
MEM[(char *)&cache] = 0;
MEM[(char *)&model] = 0;
cpu_MHz[0] = 0;
model_name[0] = 0;
vendor_id[0] = 0;
info_32 = fopen ("/proc/cpuinfo", "r");
if (info_32 != 0B)
  goto <bb 62>; [73.26%]
else
  goto <bb 80>; [26.74%]

FREQ:7591
<bb 62>:
# cpus_36 = PHI <cpus_103(61), 0(10)>
_75 = __fgets_alias (&buffer, 1024, info_32);
if (_75 != 0B)
  goto <bb 11>; [85.00%]
else
  goto <bb 63>; [15.00%]

FREQ:6452
<bb 11>:
_33 = strlen (&buffer);
_35 = strncmp (&buffer, "processor", 9);
if (_35 == 0)
  goto <bb 12>; [50.00%]
else
  goto <bb 13>; [50.00%]

FREQ:3226
<bb 13>:
buffer_end_34 = &buffer + _33;
_38 = strncmp (&buffer, "vendor_id", 9);
if (_38 == 0)
  goto <bb 14>; [34.00%]
else
  goto <bb 25>; [66.00%]

FREQ:2129
<bb 25>:
_47 = strncmp (&buffer, "model name", 10);
if (_47 == 0)
  goto <bb 26>; [34.00%]
else
  goto <bb 37>; [66.00%]

FREQ:1405
<bb 37>:
_56 = strncmp (&buffer, "cpu MHz", 7);
if (_56 == 0)
  goto <bb 38>; [34.00%]
else
  goto <bb 49>; [66.00%]

FREQ:927
<bb 49>:
_65 = strncmp (&buffer, "cache size", 10);
if (_65 == 0)
  goto <bb 50>; [34.00%]
else
  goto <bb 61>; [66.00%]

FREQ:726
<bb 26>:
if (&MEM[(void *)&buffer + 10B] < buffer_end_34)
  goto <bb 27>; [92.50%]
else
  goto <bb 34>; [7.50%]

FREQ:479
<bb 38>:
if (&MEM[(void *)&buffer + 7B] < buffer_end_34)
  goto <bb 39>; [92.50%]
else
  goto <bb 46>; [7.50%]

FREQ:316
<bb 50>:
if (&MEM[(void *)&buffer + 10B] < buffer_end_34)
  goto <bb 51>; [92.50%]
else
  goto <bb 58>; [7.50%]

FREQ:1100
<bb 14>:
if (&MEM[(void *)&buffer + 9B] < buffer_end_34)
  goto <bb 15>; [92.50%]
else
  goto <bb 22>; [7.50%]

FREQ:672
<bb 27>:
_182 = MEM[(char *)&buffer + 10B];
_246 = (unsigned char) _182;
if (_246 > 58)
  goto <bb 29>; [50.00%]
else
  goto <bb 28>; [50.00%]

FREQ:443
<bb 39>:
_24 = MEM[(char *)&buffer + 7B];
_196 = (unsigned char) _24;
if (_196 > 58)
  goto <bb 41>; [50.00%]
else
  goto <bb 40>; [50.00%]

FREQ:292
<bb 51>:
_223 = MEM[(char *)&buffer + 10B];
_210 = (unsigned char) _223;
if (_210 > 58)
  goto <bb 53>; [50.00%]
else
  goto <bb 52>; [50.00%]

FREQ:1018
<bb 15>:
_232 = MEM[(char *)&buffer + 9B];
_264 = (unsigned char) _232;
if (_264 > 58)
  goto <bb 17>; [50.00%]
else
  goto <bb 16>; [50.00%]

FREQ:672
<bb 28>:
_249 = (int) _246;
_250 = 288230380446679552 >> _249;
_251 = _250 & 1;
_252 = _251 == 0;

FREQ:443
<bb 40>:
_195 = (int) _196;
_5 = 288230380446679552 >> _195;
_225 = _5 & 1;
_211 = _225 == 0;

FREQ:292
<bb 52>:
_207 = (int) _210;
_187 = 288230380446679552 >> _207;
_227 = _187 & 1;
_199 = _227 == 0;

FREQ:1018
<bb 16>:
_267 = (int) _264;
_268 = 288230380446679552 >> _267;
_269 = _268 & 1;
_270 = _269 == 0;

FREQ:672
<bb 29>:
# _253 = PHI <_252(28), 1(27)>
if (_253 != 0)
  goto <bb 87>; [3.75%]
else
  goto <bb 30>; [96.25%]

FREQ:443
<bb 41>:
# _192 = PHI <_211(40), 1(39)>
if (_192 != 0)
  goto <bb 88>; [3.75%]
else
  goto <bb 42>; [96.25%]

FREQ:292
<bb 53>:
# _204 = PHI <_199(52), 1(51)>
if (_204 != 0)
  goto <bb 89>; [3.75%]
else
  goto <bb 54>; [96.25%]

FREQ:1018
<bb 17>:
# _271 = PHI <_270(16), 1(15)>
if (_271 != 0)
  goto <bb 86>; [3.75%]
else
  goto <bb 18>; [96.25%]

FREQ:5876
<bb 30>:
# cp_215 = PHI <cp_49(33), &MEM[(void *)&buffer + 10B](29)>
cp_49 = cp_215 + 1;
if (buffer_end_34 > cp_49)
  goto <bb 31>; [92.50%]
else
  goto <bb 34>; [7.50%]

FREQ:5433
<bb 31>:
_50 = *cp_49;
_190 = (unsigned char) _50;
if (_190 > 58)
  goto <bb 33>; [50.00%]
else
  goto <bb 32>; [50.00%]

FREQ:5433
<bb 32>:
_189 = (int) _190;
_13 = 288230380446679552 >> _189;
_11 = _13 & 1;
_73 = _11 == 0;

FREQ:5433
<bb 33>:
# _77 = PHI <_73(32), 1(31)>
if (_77 != 0)
  goto <bb 87>; [3.75%]
else
  goto <bb 30>; [96.25%]

FREQ:3878
<bb 42>:
# cp_212 = PHI <cp_58(45), &MEM[(void *)&buffer + 7B](41)>
cp_58 = cp_212 + 1;
if (buffer_end_34 > cp_58)
  goto <bb 43>; [92.50%]
else
  goto <bb 46>; [7.50%]

FREQ:3586
<bb 43>:
_59 = *cp_58;
_202 = (unsigned char) _59;
if (_202 > 58)
  goto <bb 45>; [50.00%]
else
  goto <bb 44>; [50.00%]

FREQ:3586
<bb 44>:
_201 = (int) _202;
_185 = 288230380446679552 >> _201;
_226 = _185 & 1;
_205 = _226 == 0;

FREQ:3586
<bb 45>:
# _198 = PHI <_205(44), 1(43)>
if (_198 != 0)
  goto <bb 88>; [3.75%]
else
  goto <bb 42>; [96.25%]

FREQ:2560
<bb 54>:
# cp_193 = PHI <cp_67(57), &MEM[(void *)&buffer + 10B](53)>
cp_67 = cp_193 + 1;
if (buffer_end_34 > cp_67)
  goto <bb 55>; [92.50%]
else
  goto <bb 58>; [7.50%]

FREQ:2367
<bb 55>:
_68 = *cp_67;
_66 = (unsigned char) _68;
if (_66 > 58)
  goto <bb 57>; [50.00%]
else
  goto <bb 56>; [50.00%]

FREQ:2367
<bb 56>:
_102 = (int) _66;
_78 = 288230380446679552 >> _102;
_222 = _78 & 1;
_228 = _222 == 0;

FREQ:2367
<bb 57>:
# _214 = PHI <_228(56), 1(55)>
if (_214 != 0)
  goto <bb 89>; [3.75%]
else
  goto <bb 54>; [96.25%]

FREQ:8903
<bb 18>:
# cp_216 = PHI <cp_40(21), &MEM[(void *)&buffer + 9B](17)>
cp_40 = cp_216 + 1;
if (buffer_end_34 > cp_40)
  goto <bb 19>; [92.50%]
else
  goto <bb 22>; [7.50%]

FREQ:8233
<bb 19>:
_41 = *cp_40;
_255 = (unsigned char) _41;
if (_255 > 58)
  goto <bb 21>; [50.00%]
else
  goto <bb 20>; [50.00%]

FREQ:8233
<bb 20>:
_258 = (int) _255;
_259 = 288230380446679552 >> _258;
_260 = _259 & 1;
_261 = _260 == 0;

FREQ:8233
<bb 21>:
# _262 = PHI <_261(20), 1(19)>
if (_262 != 0)
  goto <bb 86>; [3.75%]
else
  goto <bb 18>; [96.25%]

FREQ:239
<bb 87>:
# cp_39 = PHI <&MEM[(void *)&buffer + 10B](29), cp_49(33)>
__builtin___strcpy_chk (&model_name, cp_39, 1024);
goto <bb 34>; [100.00%]

FREQ:158
<bb 88>:
# cp_209 = PHI <&MEM[(void *)&buffer + 7B](41), cp_58(45)>
__builtin___strcpy_chk (&cpu_MHz, cp_209, 1024);
goto <bb 46>; [100.00%]

FREQ:104
<bb 89>:
# cp_208 = PHI <&MEM[(void *)&buffer + 10B](53), cp_67(57)>
__builtin___strcpy_chk (&cache, cp_208, 1024);
goto <bb 58>; [100.00%]

FREQ:362
<bb 86>:
# cp_48 = PHI <&MEM[(void *)&buffer + 9B](17), cp_40(21)>
__builtin___strcpy_chk (&vendor_id, cp_48, 1024);
goto <bb 22>; [100.00%]

FREQ:724
<bb 34>:
_55 = MEM[(const char *)&model_name];
if (_55 != 0)
  goto <bb 35>; [33.00%]
else
  goto <bb 61>; [67.00%]

FREQ:478
<bb 46>:
_64 = MEM[(const char *)&cpu_MHz];
if (_64 != 0)
  goto <bb 47>; [33.00%]
else
  goto <bb 61>; [67.00%]

FREQ:315
<bb 58>:
_74 = MEM[(const char *)&cache];
if (_74 != 0)
  goto <bb 59>; [33.00%]
else
  goto <bb 61>; [67.00%]

FREQ:1097
<bb 22>:
_46 = MEM[(const char *)&vendor_id];
if (_46 != 0)
  goto <bb 23>; [33.00%]
else
  goto <bb 61>; [67.00%]

FREQ:239
<bb 35>:
_108 = strlen (&model_name);
_109 = _108 + 18446744073709551615;
_110 = &model_name + _109;
_111 = *_110;
if (_111 == 10)
  goto <bb 36>; [37.68%]
else
  goto <bb 61>; [62.32%]

FREQ:158
<bb 47>:
_112 = strlen (&cpu_MHz);
_113 = _112 + 18446744073709551615;
_114 = &cpu_MHz + _113;
_115 = *_114;
if (_115 == 10)
  goto <bb 48>; [37.68%]
else
  goto <bb 61>; [62.32%]

FREQ:104
<bb 59>:
_116 = strlen (&cache);
_117 = _116 + 18446744073709551615;
_118 = &cache + _117;
_119 = *_118;
if (_119 == 10)
  goto <bb 60>; [37.68%]
else
  goto <bb 61>; [62.32%]

FREQ:362
<bb 23>:
_104 = strlen (&vendor_id);
_105 = _104 + 18446744073709551615;
_106 = &vendor_id + _105;
_107 = *_106;
if (_107 == 10)
  goto <bb 24>; [37.68%]
else
  goto <bb 61>; [62.32%]

FREQ:90
<bb 36>:
*_110 = 0;
goto <bb 61>; [100.00%]

FREQ:59
<bb 48>:
*_114 = 0;
goto <bb 61>; [100.00%]

FREQ:39
<bb 60>:
*_118 = 0;

FREQ:136
<bb 24>:
*_106 = 0;
goto <bb 61>; [100.00%]

FREQ:3226
<bb 12>:
cpus_37 = cpus_36 + 1;
goto <bb 61>; [100.00%]

FREQ:6451
<bb 61>:
# cpus_103 = PHI <cpus_36(22), cpus_37(12), cpus_36(24), cpus_36(34), cpus_36(36), cpus_36(46), cpus_36(48), cpus_36(49), cpus_36(58), cpus_36(60), cpus_36(23), cpus_36(35), cpus_36(47), cpus_36(59)>

FREQ:1139
<bb 63>:
if (cpus_36 > 1)
  goto <bb 64>; [64.00%]
else
  goto <bb 67>; [36.00%]

FREQ:729
<bb 64>:
if (cpus_36 == 2)
  goto <bb 65>; [34.00%]
else
  goto <bb 66>; [66.00%]

FREQ:481
<bb 66>:
__builtin___sprintf_chk (&model, 1, 1024, "%d CPU", cpus_36);

FREQ:248
<bb 65>:
__builtin_memcpy (&model, "Dual", 5);
goto <bb 67>; [100.00%]

FREQ:1139
<bb 67>:
_79 = strlen (&model);
cp_80 = &model + _79;
_81 = vendor_id[0];
if (_81 != 0)
  goto <bb 68>; [50.00%]
else
  goto <bb 71>; [50.00%]

FREQ:569
<bb 68>:
if (&model != cp_80)
  goto <bb 69>; [70.00%]
else
  goto <bb 70>; [30.00%]

FREQ:399
<bb 69>:
cp_82 = cp_80 + 1;
*cp_80 = 32;

FREQ:569
<bb 70>:
# cp_83 = PHI <&model(68), cp_82(69)>
__builtin_strcpy (cp_83, &vendor_id);
_85 = strlen (&vendor_id);
cp_86 = cp_83 + _85;

FREQ:1139
<bb 71>:
# cp_88 = PHI <cp_80(67), cp_86(70)>
_87 = model_name[0];
if (_87 != 0)
  goto <bb 72>; [50.00%]
else
  goto <bb 75>; [50.00%]

FREQ:569
<bb 72>:
if (&model != cp_88)
  goto <bb 73>; [70.00%]
else
  goto <bb 74>; [30.00%]

FREQ:399
<bb 73>:
cp_89 = cp_88 + 1;
*cp_88 = 32;

FREQ:569
<bb 74>:
# cp_90 = PHI <&model(72), cp_89(73)>
__builtin_strcpy (cp_90, &model_name);
_92 = strlen (&model_name);
cp_93 = cp_90 + _92;

FREQ:1139
<bb 75>:
# cp_95 = PHI <cp_88(71), cp_93(74)>
_94 = cpu_MHz[0];
if (_94 != 0)
  goto <bb 76>; [50.00%]
else
  goto <bb 79>; [50.00%]

FREQ:569
<bb 76>:
if (&model != cp_95)
  goto <bb 77>; [70.00%]
else
  goto <bb 78>; [30.00%]

FREQ:399
<bb 77>:
cp_96 = cp_95 + 1;
*cp_95 = 32;

FREQ:569
<bb 78>:
# cp_101 = PHI <&model(76), cp_96(77)>
_97 = strtod (&cpu_MHz, 0B);
f_98 = (float) _97;
_99 = f_98 + 5.0e-1;
i_100 = (int) _99;
__builtin___sprintf_chk (&cpu_MHz, 1, 1024, "%dMHz", i_100);
__builtin_strcpy (cp_101, &cpu_MHz);

FREQ:1139
<bb 79>:
fclose (info_32);

FREQ:1588
<bb 81>:
model[0] = 0;
cache[0] = 0;

FREQ:1554
<bb 80>:
buffer ={v} {CLOBBER};
vendor_id ={v} {CLOBBER};
model_name ={v} {CLOBBER};
cpu_MHz ={v} {CLOBBER};
goto <bb 82>; [100.00%]

FREQ:3142
<bb 82>:
__builtin___sprintf_chk (&buffer, 1, 1024, "CPU                 : %s\n", &model);
__printf_chk (1, "%s", &buffer);
if (write_to_file_9(D) != 0)
  goto <bb 83>; [36.64%]
else
  goto <bb 85>; [63.36%]

FREQ:1151
<bb 83>:
__builtin_fputs (&buffer, global_ofile_10(D));
__builtin___sprintf_chk (&buffer, 1, 1024, "L2 Cache            : %s\n", &cache);
__printf_chk (1, "%s", &buffer);
__builtin_fputs (&buffer, global_ofile_10(D));
__builtin___sprintf_chk (&buffer, 1, 1024, "OS                  : %s\n", &os);
__printf_chk (1, "%s", &buffer);
__builtin_fputs (&buffer, global_ofile_10(D));

FREQ:1991
<bb 85>:
__builtin___sprintf_chk (&buffer, 1, 1024, "L2 Cache            : %s\n", &cache);
__printf_chk (1, "%s", &buffer);
__builtin___sprintf_chk (&buffer, 1, 1024, "OS                  : %s\n", &os);
__printf_chk (1, "%s", &buffer);
goto <bb 84>; [100.00%]

FREQ:3142
<bb 84>:
buffer ={v} {CLOBBER};
os ={v} {CLOBBER};
model ={v} {CLOBBER};
cache ={v} {CLOBBER};
os_command ={v} {CLOBBER};
return;
```