.text

00010074 register\_fini: addi a5, zero, 0

00010078 c.beqz a5, LOC\_00000

0001007a c.lui a0, 65536

0001007c addi a0, a0, 894

00010080 c.j atexit

00010082 LOC\_00000: c.jr ra

00010084 \_start: auipc gp, 8192

00010088 addi gp, gp, -964

0001008c addi a0, gp, -972

00010090 addi a2, gp, -944

00010094 c.sub a2, a0

00010096 c.li a1, 0

00010098 c.jal memset

0001009a auipc a0, 0

0001009e addi a0, a0, 792

000100a2 c.beqz a0, LOC\_00001

000100a4 auipc a0, 0

000100a8 addi a0, a0, 730

000100ac c.jal atexit

000100ae LOC\_00001: c.jal \_\_libc\_init\_array

000100b0 c.lwsp a0, 0(sp)

000100b2 c.addi4spn a1, sp, 4

000100b4 c.li a2, 0

000100b6 c.jal main

000100b8 c.j exit

000100ba \_\_do\_global\_dtors\_aux: c.addi sp, -16

000100bc c.swsp s0, 8(sp)

000100be lbu a5, -972(gp)

000100c2 c.swsp ra, 12(sp)

000100c4 c.bnez a5, LOC\_00002

000100c6 addi a5, zero, 0

000100ca c.beqz a5, LOC\_00003

000100cc c.lui a0, 69632

000100ce addi a0, a0, 1104

000100d2 auipc ra, 0

000100d6 jalr ra, 0(zero)

000100da LOC\_00003: c.li a5, 1

000100dc sb a5, -972(gp)

000100e0 LOC\_00002: c.lwsp ra, 12(sp)

000100e2 c.lwsp s0, 8(sp)

000100e4 c.addi sp, 16

000100e6 c.jr ra

000100e8 frame\_dummy: addi a5, zero, 0

000100ec c.beqz a5, LOC\_00004

000100ee c.lui a0, 69632

000100f0 addi a1, gp, -968

000100f4 addi a0, a0, 1104

000100f8 auipc t1, 0

000100fc jalr zero, 0(zero)

00010100 LOC\_00004: c.jr ra

00010102 INVALID

00010104 \_Z8multiplyii: addi sp, sp, -48

00010108 sw s0, 44(sp)

0001010c addi s0, sp, 48

00010110 sw a0, -36(s0)

00010114 sw a1, -40(s0)

00010118 lw a4, -36(s0)

0001011c lw a5, -40(s0)

00010120 mul a5, a4, a5

00010124 sw a5, -20(s0)

00010128 lw a5, -20(s0)

0001012c addi a0, a5, 0

00010130 lw s0, 44(sp)

00010134 addi sp, sp, 48

00010138 jalr zero, 0(ra)

0001013c main: addi sp, sp, -32

00010140 sw ra, 28(sp)

00010144 sw s0, 24(sp)

00010148 addi s0, sp, 32

0001014c addi a5, zero, 3

00010150 sw a5, -20(s0)

00010154 addi a5, zero, 5

00010158 sw a5, -24(s0)

0001015c lw a4, -20(s0)

00010160 lw a5, -24(s0)

00010164 mul a5, a4, a5

00010168 sw a5, -28(s0)

0001016c lw a1, -28(s0)

00010170 lw a0, -24(s0)

00010174 jal ra, \_Z8multiplyii

00010178 sw a0, -20(s0)

0001017c addi a5, zero, 0

00010180 addi a0, a5, 0

00010184 lw ra, 28(sp)

00010188 lw s0, 24(sp)

0001018c addi sp, sp, 32

00010190 jalr zero, 0(ra)

00010194 exit: c.addi sp, -16

00010196 c.li a1, 0

00010198 c.swsp s0, 8(sp)

0001019a c.swsp ra, 12(sp)

0001019c c.mv s0, a0

0001019e c.jal \_\_call\_exitprocs

000101a0 lw a0, -984(gp)

000101a4 c.lw a5, 60(a0)

000101a6 c.beqz a5, LOC\_00005

000101a8 c.jalr a5

000101aa LOC\_00005: c.mv a0, s0

000101ac c.jal \_exit

000101ae \_\_libc\_init\_array: c.addi sp, -16

000101b0 c.swsp s0, 8(sp)

000101b2 c.swsp s2, 0(sp)

000101b4 c.lui s0, 69632

000101b6 c.lui s2, 69632

000101b8 addi a5, s0, 1204

000101bc addi s2, s2, 1204

000101c0 sub s2, s2, a5

000101c4 c.swsp ra, 12(sp)

000101c6 c.swsp s1, 4(sp)

000101c8 srai s2, s2, 2

000101cc beq s2, zero, LOC\_00006

000101d0 addi s0, s0, 1204

000101d4 c.li s1, 0

000101d6 LOC\_00007: c.lw a5, 0(s0)

000101d8 c.addi s1, 1

000101da c.addi s0, 4

000101dc c.jalr a5

000101de bne s2, s1, LOC\_00007

000101e2 LOC\_00006: c.lui s0, 69632

000101e4 c.lui s2, 69632

000101e6 addi a5, s0, 1204

000101ea addi s2, s2, 1212

000101ee sub s2, s2, a5

000101f2 srai s2, s2, 2

000101f6 beq s2, zero, LOC\_00008

000101fa addi s0, s0, 1204

000101fe c.li s1, 0

00010200 LOC\_00009: c.lw a5, 0(s0)

00010202 c.addi s1, 1

00010204 c.addi s0, 4

00010206 c.jalr a5

00010208 bne s2, s1, LOC\_00009

0001020c LOC\_00008: c.lwsp ra, 12(sp)

0001020e c.lwsp s0, 8(sp)

00010210 c.lwsp s1, 4(sp)

00010212 c.lwsp s2, 0(sp)

00010214 c.addi sp, 16

00010216 c.jr ra

00010218 memset: c.li t1, 15

0001021a c.mv a4, a0

0001021c bgeu t1, a2, LOC\_0000a

00010220 andi a5, a4, 15

00010224 c.bnez a5, LOC\_0000b

00010226 LOC\_0000f: c.bnez a1, LOC\_0000c

00010228 LOC\_0000e: andi a3, a2, -16

0001022c c.andi a2, 15

0001022e c.add a3, a4

00010230 LOC\_0000d: c.sw a1, 0(a4)

00010232 c.sw a1, 4(a4)

00010234 c.sw a1, 8(a4)

00010236 c.sw a1, 12(a4)

00010238 c.addi a4, 16

0001023a bltu a4, a3, LOC\_0000d

0001023e c.bnez a2, LOC\_0000a

00010240 c.jr ra

00010242 LOC\_0000a: sub a3, t1, a2

00010246 c.slli a3, 2

00010248 auipc t0, 0

0001024c c.add a3, t0

0001024e jalr zero, 10(a3)

00010252 sb a1, 14(a4)

00010256 sb a1, 13(a4)

0001025a sb a1, 12(a4)

0001025e sb a1, 11(a4)

00010262 sb a1, 10(a4)

00010266 sb a1, 9(a4)

0001026a sb a1, 8(a4)

0001026e sb a1, 7(a4)

00010272 sb a1, 6(a4)

00010276 sb a1, 5(a4)

0001027a sb a1, 4(a4)

0001027e sb a1, 3(a4)

00010282 sb a1, 2(a4)

00010286 sb a1, 1(a4)

0001028a sb a1, 0(a4)

0001028e c.jr ra

00010290 LOC\_0000c: andi a1, a1, 255

00010294 slli a3, a1, 8

00010298 c.or a1, a3

0001029a slli a3, a1, 16

0001029e c.or a1, a3

000102a0 c.j LOC\_0000e

000102a2 LOC\_0000b: slli a3, a5, 2

000102a6 auipc t0, 0

000102aa c.add a3, t0

000102ac c.mv t0, ra

000102ae jalr ra, -88(a3)

000102b2 c.mv ra, t0

000102b4 c.addi a5, -16

000102b6 c.sub a4, a5

000102b8 c.add a2, a5

000102ba bgeu t1, a2, LOC\_0000a

000102be c.j LOC\_0000f

000102c0 \_\_call\_exitprocs: c.addi16sp sp, -48

000102c2 c.swsp s4, 24(sp)

000102c4 lw s4, -984(gp)

000102c8 c.swsp s2, 32(sp)

000102ca c.swsp ra, 44(sp)

000102cc lw s2, 328(s4)

000102d0 c.swsp s0, 40(sp)

000102d2 c.swsp s1, 36(sp)

000102d4 c.swsp s3, 28(sp)

000102d6 c.swsp s5, 20(sp)

000102d8 c.swsp s6, 16(sp)

000102da c.swsp s7, 12(sp)

000102dc c.swsp s8, 8(sp)

000102de beq s2, zero, LOC\_00010

000102e2 c.mv s6, a0

000102e4 c.mv s7, a1

000102e6 c.li s5, 1

000102e8 c.li s3, -1

000102ea LOC\_00017: lw s1, 4(s2)

000102ee addi s0, s1, -1

000102f2 blt s0, zero, LOC\_00010

000102f6 c.slli s1, 2

000102f8 c.add s1, s2

000102fa LOC\_00012: beq s7, zero, LOC\_00011

000102fe lw a5, 260(s1)

00010302 beq a5, s7, LOC\_00011

00010306 LOC\_00014: c.addi s0, -1

00010308 c.addi s1, -4

0001030a bne s0, s3, LOC\_00012

0001030e LOC\_00010: c.lwsp ra, 44(sp)

00010310 c.lwsp s0, 40(sp)

00010312 c.lwsp s1, 36(sp)

00010314 c.lwsp s2, 32(sp)

00010316 c.lwsp s3, 28(sp)

00010318 c.lwsp s4, 24(sp)

0001031a c.lwsp s5, 20(sp)

0001031c c.lwsp s6, 16(sp)

0001031e c.lwsp s7, 12(sp)

00010320 c.lwsp s8, 8(sp)

00010322 c.addi16sp sp, 48

00010324 c.jr ra

00010326 LOC\_00011: lw a5, 4(s2)

0001032a c.lw a3, 4(s1)

0001032c c.addi a5, -1

0001032e beq a5, s0, LOC\_00013

00010332 sw zero, 4(s1)

00010336 LOC\_0001a: c.beqz a3, LOC\_00014

00010338 lw a5, 392(s2)

0001033c sll a4, s5, s0

00010340 lw s8, 4(s2)

00010344 c.and a5, a4

00010346 c.bnez a5, LOC\_00015

00010348 c.jalr a3

0001034a LOC\_00019: lw a4, 4(s2)

0001034e lw a5, 328(s4)

00010352 bne a4, s8, LOC\_00016

00010356 beq a5, s2, LOC\_00014

0001035a LOC\_00016: c.beqz a5, LOC\_00010

0001035c c.mv s2, a5

0001035e c.j LOC\_00017

00010360 LOC\_00015: lw a5, 396(s2)

00010364 lw a1, 132(s1)

00010368 c.and a4, a5

0001036a c.bnez a4, LOC\_00018

0001036c c.mv a0, s6

0001036e c.jalr a3

00010370 c.j LOC\_00019

00010372 LOC\_00013: sw s0, 4(s2)

00010376 c.j LOC\_0001a

00010378 LOC\_00018: c.mv a0, a1

0001037a c.jalr a3

0001037c c.j LOC\_00019

0001037e \_\_libc\_fini\_array: c.addi sp, -16

00010380 c.swsp s0, 8(sp)

00010382 c.lui a5, 69632

00010384 c.lui s0, 69632

00010386 addi a5, a5, 1212

0001038a addi s0, s0, 1216

0001038e c.sub s0, a5

00010390 c.swsp s1, 4(sp)

00010392 c.swsp ra, 12(sp)

00010394 srai s1, s0, 2

00010398 c.beqz s1, LOC\_0001b

0001039a c.addi s0, -4

0001039c c.add s0, a5

0001039e LOC\_0001c: c.lw a5, 0(s0)

000103a0 c.addi s1, -1

000103a2 c.addi s0, -4

000103a4 c.jalr a5

000103a6 c.bnez s1, LOC\_0001c

000103a8 LOC\_0001b: c.lwsp ra, 12(sp)

000103aa c.lwsp s0, 8(sp)

000103ac c.lwsp s1, 4(sp)

000103ae c.addi sp, 16

000103b0 c.jr ra

000103b2 atexit: c.mv a1, a0

000103b4 c.li a3, 0

000103b6 c.li a2, 0

000103b8 c.li a0, 0

000103ba c.j \_\_register\_exitproc

000103bc \_\_register\_exitproc: lw a4, -984(gp)

000103c0 lw a5, 328(a4)

000103c4 c.beqz a5, LOC\_0001d

000103c6 LOC\_00021: c.lw a4, 4(a5)

000103c8 c.li a6, 31

000103ca blt a6, a4, LOC\_0001e

000103ce slli a6, a4, 2

000103d2 c.beqz a0, LOC\_0001f

000103d4 add t1, a5, a6

000103d8 sw a2, 136(t1)

000103dc lw a7, 392(a5)

000103e0 c.li a2, 1

000103e2 sll a2, a2, a4

000103e6 or a7, a7, a2

000103ea sw a7, 392(a5)

000103ee sw a3, 264(t1)

000103f2 c.li a3, 2

000103f4 beq a0, a3, LOC\_00020

000103f8 LOC\_0001f: c.addi a4, 1

000103fa c.sw a4, 4(a5)

000103fc c.add a5, a6

000103fe c.sw a1, 8(a5)

00010400 c.li a0, 0

00010402 c.jr ra

00010404 LOC\_0001d: addi a5, a4, 332

00010408 sw a5, 328(a4)

0001040c c.j LOC\_00021

0001040e LOC\_00020: lw a3, 396(a5)

00010412 c.addi a4, 1

00010414 c.sw a4, 4(a5)

00010416 c.or a3, a2

00010418 sw a3, 396(a5)

0001041c c.add a5, a6

0001041e c.sw a1, 8(a5)

00010420 c.li a0, 0

00010422 c.jr ra

00010424 LOC\_0001e: c.li a0, -1

00010426 c.jr ra

00010428 \_exit: addi a7, zero, 93

0001042c ecall

00010430 blt a0, zero, LOC\_00022

00010434 LOC\_00023: c.j LOC\_00023

00010436 LOC\_00022: c.addi sp, -16

00010438 c.swsp s0, 8(sp)

0001043a c.mv s0, a0

0001043c c.swsp ra, 12(sp)

0001043e sub s0, zero, s0

00010442 c.jal \_\_errno

00010444 c.sw s0, 0(a0)

00010446 LOC\_00024: c.j LOC\_00024

00010448 \_\_errno: lw a0, -976(gp)

0001044c c.jr ra

.symtab

Symbol Value Size Type Bind Vis Index Name

[ 0] 0x0 0 NOTYPE LOCAL DEFAULT UNDEF

[ 1] 0x10074 0 SECTION LOCAL DEFAULT 1

[ 2] 0x11450 0 SECTION LOCAL DEFAULT 2

[ 3] 0x114B4 0 SECTION LOCAL DEFAULT 3

[ 4] 0x114BC 0 SECTION LOCAL DEFAULT 4

[ 5] 0x114C0 0 SECTION LOCAL DEFAULT 5

[ 6] 0x118E8 0 SECTION LOCAL DEFAULT 6

[ 7] 0x118F4 0 SECTION LOCAL DEFAULT 7

[ 8] 0x0 0 SECTION LOCAL DEFAULT 8

[ 9] 0x0 0 SECTION LOCAL DEFAULT 9

[ 10] 0x0 0 FILE LOCAL DEFAULT ABS \_\_call\_atexit.c

[ 11] 0x10074 16 FUNC LOCAL DEFAULT 1 register\_fini

[ 12] 0x0 0 FILE LOCAL DEFAULT ABS crtstuff.c

[ 13] 0x11450 0 OBJECT LOCAL DEFAULT 2 \_\_EH\_FRAME\_BEGIN\_\_

[ 14] 0x100BA 0 FUNC LOCAL DEFAULT 1 \_\_do\_global\_dtors\_aux

[ 15] 0x118F4 1 OBJECT LOCAL DEFAULT 7 completed.1

[ 16] 0x114BC 0 OBJECT LOCAL DEFAULT 4 \_\_do\_global\_dtors\_aux\_fini\_array\_entry

[ 17] 0x100E8 0 FUNC LOCAL DEFAULT 1 frame\_dummy

[ 18] 0x118F8 24 OBJECT LOCAL DEFAULT 7 object.0

[ 19] 0x114B8 0 OBJECT LOCAL DEFAULT 3 \_\_frame\_dummy\_init\_array\_entry

[ 20] 0x0 0 FILE LOCAL DEFAULT ABS sample.cpp

[ 21] 0x0 0 FILE LOCAL DEFAULT ABS exit.c

[ 22] 0x0 0 FILE LOCAL DEFAULT ABS impure.c

[ 23] 0x114C0 1064 OBJECT LOCAL DEFAULT 5 impure\_data

[ 24] 0x0 0 FILE LOCAL DEFAULT ABS init.c

[ 25] 0x0 0 FILE LOCAL DEFAULT ABS fini.c

[ 26] 0x0 0 FILE LOCAL DEFAULT ABS atexit.c

[ 27] 0x0 0 FILE LOCAL DEFAULT ABS \_\_atexit.c

[ 28] 0x0 0 FILE LOCAL DEFAULT ABS sys\_exit.c

[ 29] 0x0 0 FILE LOCAL DEFAULT ABS errno.c

[ 30] 0x0 0 FILE LOCAL DEFAULT ABS crtstuff.c

[ 31] 0x114B0 0 OBJECT LOCAL DEFAULT 2 \_\_FRAME\_END\_\_

[ 32] 0x0 0 FILE LOCAL DEFAULT ABS

[ 33] 0x114C0 0 NOTYPE LOCAL DEFAULT 4 \_\_fini\_array\_end

[ 34] 0x114BC 0 NOTYPE LOCAL DEFAULT 4 \_\_fini\_array\_start

[ 35] 0x114BC 0 NOTYPE LOCAL DEFAULT 3 \_\_init\_array\_end

[ 36] 0x114B4 0 NOTYPE LOCAL DEFAULT 3 \_\_preinit\_array\_end

[ 37] 0x114B4 0 NOTYPE LOCAL DEFAULT 3 \_\_init\_array\_start

[ 38] 0x114B4 0 NOTYPE LOCAL DEFAULT 3 \_\_preinit\_array\_start

[ 39] 0x11CC0 0 NOTYPE GLOBAL DEFAULT ABS \_\_global\_pointer$

[ 40] 0x10104 56 FUNC GLOBAL DEFAULT 1 \_Z8multiplyii

[ 41] 0x10448 6 FUNC GLOBAL DEFAULT 1 \_\_errno

[ 42] 0x118E8 0 NOTYPE GLOBAL DEFAULT 6 \_\_SDATA\_BEGIN\_\_

[ 43] 0x118EC 0 OBJECT GLOBAL HIDDEN 6 \_\_dso\_handle

[ 44] 0x118E8 4 OBJECT GLOBAL DEFAULT 6 \_global\_impure\_ptr

[ 45] 0x101AE 106 FUNC GLOBAL DEFAULT 1 \_\_libc\_init\_array

[ 46] 0x1037E 52 FUNC GLOBAL DEFAULT 1 \_\_libc\_fini\_array

[ 47] 0x102C0 190 FUNC GLOBAL DEFAULT 1 \_\_call\_exitprocs

[ 48] 0x10084 54 FUNC GLOBAL DEFAULT 1 \_start

[ 49] 0x103BC 108 FUNC GLOBAL DEFAULT 1 \_\_register\_exitproc

[ 50] 0x11910 0 NOTYPE GLOBAL DEFAULT 7 \_\_BSS\_END\_\_

[ 51] 0x118F4 0 NOTYPE GLOBAL DEFAULT 7 \_\_bss\_start

[ 52] 0x10218 168 FUNC GLOBAL DEFAULT 1 memset

[ 53] 0x1013C 88 FUNC GLOBAL DEFAULT 1 main

[ 54] 0x103B2 10 FUNC GLOBAL DEFAULT 1 atexit

[ 55] 0x118F0 4 OBJECT GLOBAL DEFAULT 6 \_impure\_ptr

[ 56] 0x114C0 0 NOTYPE GLOBAL DEFAULT 5 \_\_DATA\_BEGIN\_\_

[ 57] 0x118F4 0 NOTYPE GLOBAL DEFAULT 6 \_edata

[ 58] 0x11910 0 NOTYPE GLOBAL DEFAULT 7 \_end

[ 59] 0x10194 26 FUNC GLOBAL DEFAULT 1 exit

[ 60] 0x10428 32 FUNC GLOBAL DEFAULT 1 \_exit