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|---|---|
| <b>FILE HEADER</b><br>FILE NAME<br>0x00000000<br>TEXT ADDRESS<br>0x00000009<br>DATA ADDRESS<br>0x0000000D<br>SYMBOL TABLE ADDRESS<br>0x00000011<br>DEBUG INFORMATION ADDRESS<br>0x00000015  | FILE.exe (9)<br><br>0x00000019<br><br>0x0000010D<br><br>0x00000119<br><br>0x00000181  |
| <b>TEXT</b><br>0x00000019<br>0x0000001D<br>0x00000021<br>0x00000025<br>0x00000029<br>0x0000002D<br>0x00000031<br>0x00000035<br>0x00000039<br>0x0000003D<br>0x00000041<br>0x00000045<br>0x00000049<br>0x0000004D<br>0x00000051<br>0x00000055<br>0x00000059<br>0x0000005D<br>0x00000061<br>0x00000065<br>0x00000069<br>0x0000006D<br>0x00000071<br>0x00000075<br>0x00000079<br>0x0000007D<br>0x00000081<br>0x00000085<br>0x00000089<br>0x0000008D<br>0x00000091<br>0x00000095<br>0x00000099<br>0x0000009D<br>0x000000A1 | main:   addi \$t0, \$zero, 30<br>addi \$t1, \$zero, 75<br>addi \$sp, \$sp, -4<br>addi \$t2, \$zero, 7<br>sw \$t2, 0x4(\$sp)<br>lw \$t3, -0x8000(\$gp)<br>lw \$t4, -0x7FFC(\$gp)<br>add \$t5, \$t3, \$t0<br>add \$t5, \$t5, \$t1<br>add \$t5, \$t5, \$t4<br>addi \$sp, \$sp, -40<br>sw \$t5, 0x10(\$sp)<br>sw \$t3, 0x20(\$sp)<br>sw \$t1, 0x8(\$sp)<br>add \$a0, \$t0, \$zero<br>add \$a1, \$t1, \$zero<br>jal delta<br>add \$t3, \$v0, \$zero<br>addi \$t3, \$t3, 15<br>blez \$t3, else<br>lw \$t6, 0x?(\$gp)<br>addi \$t3, \$t6, 1<br>j for<br>else:    add \$a0, \$t0, 0\$zero<br>jal factorial<br>add \$t1, \$v0, \$zero<br>for:     add \$t7, \$zero, \$zero<br>addi \$t8, \$zero, 4<br>loop:    bge \$t7, \$t8, nxtfor<br>addi \$t3, \$t3, 1<br>add \$t5, \$t0, \$t1<br>addi \$t7, \$t7, 1 #f = f +1<br>j loop<br>nxtfor:  add \$a0, \$t3, \$zero<br>jal mult |

|              |                                  |                        |
|--------------|----------------------------------|------------------------|
| 0x000000A5   | add \$t5, \$v0, \$zero           |                        |
| 0x000000A9   | addi \$v0, \$v0, 10              |                        |
| 0x000000AD   | syscall                          |                        |
| 0x000000B1   | factorial:add \$s0, \$a0, \$zero |                        |
| 0x000000B5   | addi \$t9, \$zero, 1             |                        |
| 0x000000B9   | bge \$s0, \$t9, false            |                        |
| 0x000000BD   | add \$v0, \$v0, 1                |                        |
| 0x000000C1   | jr \$ra                          |                        |
| 0x000000C5   | false:                           | addi \$sp, \$sp, -8    |
| 0x000000C9   |                                  | sw \$ra, 0(\$sp)       |
| 0x000000CD   |                                  | sw \$s0, 4(\$sp)       |
| 0x000000D1   |                                  | addi \$s1, \$s0, -1    |
| 0x000000D5   |                                  | add \$a0, \$s1, \$zero |
| 0x000000D9   |                                  | jal factorial          |
| 0x000000DD   |                                  | mul \$v0, \$v0, \$s0   |
| 0x000000E1   |                                  | lw \$ra, 0(\$sp)       |
| 0x000000E5   |                                  | lw \$s0, 4(\$sp)       |
| 0x000000E9   |                                  | addi \$sp, \$sp, 8     |
| 0x000000ED   |                                  | jr \$ra                |
| 0x000000F1   | delta:                           | bge \$a0, \$a1, delse  |
| 0x000000F5   |                                  | sub \$v0, \$a1, \$a0   |
| 0x000000F9   |                                  | jr \$ra                |
| 0x000000FD   | delse:                           | sub \$v0, \$a0, \$a1   |
| 0x00000101   |                                  | jr \$ra                |
| 0x00000105   | mult:                            | mul \$v0, \$a0, \$a0   |
| 0x00000109   |                                  | jr \$ra                |
| DATA         |                                  |                        |
| 0x0000010D   | a: .word 5                       |                        |
| 0x00000111   | one: .word 1                     |                        |
| 0x00000115   | glob: .word 5                    |                        |
| SYMBOL TABLE |                                  |                        |
| 0x00000119   | Symbol                           | Address                |
| 0x00000121   | main                             | 0x00000019             |
| 0x00000121   | else                             | 0x00000075             |
| 0x00000129   | for                              | 0x00000081             |
| 0x00000131   | loop                             | 0x00000089             |
| 0x00000139   | nxtfor                           | 0x0000009D             |
| 0x00000141   | factorial                        | 0x000000B1             |
| 0x00000149   | false                            | 0x000000C5             |
| 0x00000151   | delta                            | 0x000000F1             |
| 0x00000159   | delse                            | 0x000000FD             |
| 0x00000161   | mult                             | 0x00000105             |
| 0x00000169   | a                                | 0x0000010D             |
| 0x00000171   | one                              | 0x00000111             |
| 0x00000179   | glob                             | 0x00000115             |
| DEBUG INFO   |                                  |                        |
| 0x00000181   | N/A                              |                        |