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salma@salma-virtual-machine: ~/Desktop/Task1

a.c a.o b.c b.h b.o myfile myfile1
salma@salma-virtual-machine:~/Desktop/Task1$

salma@salma-virtual-machine:~/Desktop/Task1$ gcc -c a.c -o a.o
salma@salma-virtual-machine:~/Desktop/Task1$ gcc -c b.c -o b.o
salma@salma-virtual-machine:~/Desktop/Task1$ gcc -o myfile1 a.o b.o
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ readelf -s a.o

Symbol table '.symtab' contains 9 entries:
Num:  Value          Size Type Bind Vis      Ndx Name
 0: 0000000000000000    0 NOTYPE LOCAL DEFAULT UND
 1: 0000000000000000    0 FILE  LOCAL DEFAULT ABS a.c
 2: 0000000000000000    0 SECTION LOCAL DEFAULT 1 .text
 3: 0000000000000000    0 SECTION LOCAL DEFAULT 3 .data
 4: 0000000000000004    4 OBJECT LOCAL DEFAULT 3 l.o
 5: 0000000000000000    4 OBJECT GLOBAL DEFAULT 3 s
 6: 0000000000000000    4 OBJECT GLOBAL DEFAULT 4 k
 7: 0000000000000000   48 FUNC  GLOBAL DEFAULT 1 main
 8: 0000000000000000    0 NOTYPE GLOBAL DEFAULT UND func

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salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ readelf -s b.o

Symbol table '.symtab' contains 11 entries:
Num:  Value          Size Type Bind Vis      Ndx Name
 0: 0000000000000000    0 NOTYPE LOCAL DEFAULT UND
 1: 0000000000000000    0 FILE  LOCAL DEFAULT ABS b.c
 2: 0000000000000000    0 SECTION LOCAL DEFAULT 1 .text
 3: 0000000000000000    0 SECTION LOCAL DEFAULT 3 .data
 4: 0000000000000000    0 SECTION LOCAL DEFAULT 5 .rodata
 5: 0000000000000008    4 OBJECT LOCAL DEFAULT 3 temp.o
 6: 0000000000000000    4 OBJECT GLOBAL DEFAULT 3 c
 7: 0000000000000000    4 OBJECT GLOBAL DEFAULT 4 d
 8: 0000000000000004    4 OBJECT GLOBAL DEFAULT 3 f
 9: 0000000000000000   144 FUNC  GLOBAL DEFAULT 1 func
10: 0000000000000000    0 NOTYPE GLOBAL DEFAULT UND printf

salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ readelf -s myfile

Symbol table '.dynsym' contains 7 entries:
Num:  Value          Size Type Bind Vis      Ndx Name

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salma@salma-virtual-machine: ~/Desktop/Task1
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ readelf -s myfile

Symbol table '.dynsym' contains 7 entries:
Num:  Value              Size Type Bind  Vis      Ndx Name
0: 0000000000000000      0 NOTYPE LOCAL DEFAULT UND
1: 0000000000000000      0 FUNC GLOBAL DEFAULT UND [...]@GLIBC_2.34 (2)
2: 0000000000000000      0 NOTYPE WEAK DEFAULT UND _ITM_deregisterT[...]
3: 0000000000000000      0 FUNC GLOBAL DEFAULT UND [...]@GLIBC_2.2.5 (3)
4: 0000000000000000      0 NOTYPE WEAK DEFAULT UND __gmon_start__
5: 0000000000000000      0 NOTYPE WEAK DEFAULT UND _ITM_registerTMC[...]
6: 0000000000000000      0 FUNC WEAK DEFAULT UND [...]@GLIBC_2.2.5 (3)

Symbol table '.symtab' contains 45 entries:
Num:  Value              Size Type Bind  Vis      Ndx Name
0: 0000000000000000      0 NOTYPE LOCAL DEFAULT UND
1: 0000000000000000      0 FILE LOCAL DEFAULT ABS Scrt1.o
2: 000000000000038c    32 OBJECT LOCAL DEFAULT 4 __abi_tag
3: 0000000000000000      0 FILE LOCAL DEFAULT ABS crtstuff.c
4: 0000000000001090      0 FUNC LOCAL DEFAULT 16 deregister_tm_clones
5: 00000000000010c0      0 FUNC LOCAL DEFAULT 16 register_tm_clones
6: 0000000000001100      0 FUNC LOCAL DEFAULT 16 __do_global_ctors_aux
7: 0000000000004024      1 OBJECT LOCAL DEFAULT 26 completed.0
8: 0000000000003dc0      0 OBJECT LOCAL DEFAULT 22 __do_global_dtor[...]
9: 0000000000001140      0 FUNC LOCAL DEFAULT 16 frame_dummy
10: 0000000000003db8      0 OBJECT LOCAL DEFAULT 21 __frame_dummy_in[...]
11: 0000000000000000      0 FILE LOCAL DEFAULT ABS a.c
12: 0000000000004014      4 OBJECT LOCAL DEFAULT 25 l.o
13: 0000000000000000      0 FILE LOCAL DEFAULT ABS b.c
14: 0000000000004020      4 OBJECT LOCAL DEFAULT 25 temp.o
15: 0000000000000000      0 FILE LOCAL DEFAULT ABS crtstuff.c
16: 0000000000002120      0 OBJECT LOCAL DEFAULT 20 __FRAME_END__
17: 0000000000000000      0 FILE LOCAL DEFAULT ABS
18: 0000000000003dc8      0 OBJECT LOCAL DEFAULT 23 _DYNAMIC
19: 0000000000002018      0 NOTYPE LOCAL DEFAULT 19 __GNU_EH_FRAME_HDR
20: 0000000000003fb8      0 OBJECT LOCAL DEFAULT 24 __GLOBAL_OFFSET_TABLE__
21: 0000000000000000      0 FUNC GLOBAL DEFAULT UND __libc_start_mai[...]
22: 0000000000000000      0 NOTYPE WEAK DEFAULT UND _ITM_deregisterT[...]
23: 0000000000004000      0 NOTYPE WEAK DEFAULT 25 data_start
24: 000000000000402c      4 OBJECT GLOBAL DEFAULT 26 d
25: 0000000000004024      0 NOTYPE GLOBAL DEFAULT 25 _edata
26: 000000000000120c      0 FUNC GLOBAL HIDDEN 17 _fini
27: 000000000000401c      4 OBJECT GLOBAL DEFAULT 25 f
28: 0000000000000000      0 FUNC GLOBAL DEFAULT UND printf@GLIBC_2.2.5
29: 0000000000004000      0 NOTYPE GLOBAL DEFAULT 25 __data_start

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15: 0000000000000000 0 FILE LOCAL DEFAULT ABS crtstuff.c
16: 0000000000002120 0 OBJECT LOCAL DEFAULT 20 __FRAME_END__
17: 0000000000000000 0 FILE LOCAL DEFAULT ABS
18: 0000000000003dc8 0 OBJECT LOCAL DEFAULT 23 __DYNAMIC
19: 0000000000002018 0 NOTYPE LOCAL DEFAULT 19 __GNU_EH_FRAME_HDR
20: 0000000000003fb8 0 OBJECT LOCAL DEFAULT 24 __GLOBAL_OFFSET_TABLE__
21: 0000000000000000 0 FUNC GLOBAL DEFAULT UND __libc_start_main[...]
22: 0000000000000000 0 NOTYPE WEAK DEFAULT UND __ITM_deregisterT[...]
23: 0000000000004000 0 NOTYPE WEAK DEFAULT 25 data_start
24: 000000000000402c 4 OBJECT GLOBAL DEFAULT 26 d
25: 0000000000004024 0 NOTYPE GLOBAL DEFAULT 25 _edata
26: 000000000000120c 0 FUNC GLOBAL HIDDEN 17 _fini
27: 000000000000401c 4 OBJECT GLOBAL DEFAULT 25 f
28: 0000000000000000 0 FUNC GLOBAL DEFAULT UND printf@GLIBC_2.2.5
29: 0000000000004000 0 NOTYPE GLOBAL DEFAULT 25 __data_start
30: 0000000000000000 0 NOTYPE WEAK DEFAULT UND __gmon_start__
31: 0000000000004008 0 OBJECT GLOBAL HIDDEN 25 __dso_handle
32: 0000000000002000 4 OBJECT GLOBAL DEFAULT 18 __IO_stdin_used
33: 0000000000001179 144 FUNC GLOBAL DEFAULT 16 func
34: 0000000000004030 0 NOTYPE GLOBAL DEFAULT 26 __end
35: 0000000000001060 38 FUNC GLOBAL DEFAULT 16 __start
36: 0000000000004018 4 OBJECT GLOBAL DEFAULT 25 c
37: 0000000000004010 4 OBJECT GLOBAL DEFAULT 25 s
38: 0000000000004028 4 OBJECT GLOBAL DEFAULT 26 k
39: 0000000000004024 0 NOTYPE GLOBAL DEFAULT 26 __bss_start
40: 0000000000001149 48 FUNC GLOBAL DEFAULT 16 main
41: 0000000000004028 0 OBJECT GLOBAL HIDDEN 25 __TMC_END__
42: 0000000000000000 0 NOTYPE WEAK DEFAULT UND __ITM_registerTMC[...]
43: 0000000000000000 0 FUNC WEAK DEFAULT UND __cxa_finalize@G[...]
44: 0000000000001000 0 FUNC GLOBAL HIDDEN 12 __init

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salma@salma-virtual-machine:~/Desktop/Task1$ size a.o
text    data    bss     dec     hex filename
136      8        4      148     94 a.o
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ size a.o
text    data    bss     dec     hex filename
136      8        4      148     94 a.o
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ size myfile
text    data    bss     dec     hex filename
1586    620     12     2218    8aa myfile
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
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salma@salma-virtual-machine: ~/Desktop/Task1

salma@salma-virtual-machine:~/Desktop/Task1$ objdump -h a.o
a.o:      file format elf64-x86-64

Sections:
Idx Name          Size      VMA           LMA           File off  Algn
 0 .text          00000030  0000000000000000  0000000000000000  00000040  2**0
CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
 1 .data          00000008  0000000000000000  0000000000000000  00000070  2**2
CONTENTS, ALLOC, LOAD, DATA
 2 .bss           00000004  0000000000000000  0000000000000000  00000078  2**2
ALLOC
 3 .comment       0000002c  0000000000000000  0000000000000000  00000078  2**0
CONTENTS, READONLY
 4 .note.gnu-stack 00000000  0000000000000000  0000000000000000  000000a4  2**0
CONTENTS, READONLY
 5 .note.gnu.property 00000020  0000000000000000  0000000000000000  000000a8  2**3
CONTENTS, ALLOC, LOAD, READONLY, DATA
 6 .eh_frame      00000038  0000000000000000  0000000000000000  000000c8  2**3
CONTENTS, ALLOC, LOAD, RELOC, READONLY, DATA

salma@salma-virtual-machine:~/Desktop/Task1$
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salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$
salma@salma-virtual-machine:~/Desktop/Task1$ objdump -h b.o
b.o:      file format elf64-x86-64

Sections:
Idx Name          Size      VMA           LMA           File off  Algn
 0 .text          00000090  0000000000000000  0000000000000000  00000040  2**0
CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
 1 .data          0000000c  0000000000000000  0000000000000000  000000d0  2**2
CONTENTS, ALLOC, LOAD, DATA
 2 .bss           00000004  0000000000000000  0000000000000000  000000dc  2**2
ALLOC
 3 .rodata        00000014  0000000000000000  0000000000000000  000000dc  2**0
CONTENTS, ALLOC, LOAD, READONLY, DATA
 4 .comment       0000002c  0000000000000000  0000000000000000  000000f0  2**0
CONTENTS, READONLY
 5 .note.gnu-stack 00000000  0000000000000000  0000000000000000  0000011c  2**0
CONTENTS, READONLY
 6 .note.gnu.property 00000020  0000000000000000  0000000000000000  00000120  2**3
CONTENTS, ALLOC, LOAD, READONLY, DATA
 7 .eh_frame      00000038  0000000000000000  0000000000000000  00000140  2**3
CONTENTS, ALLOC, LOAD, RELOC, READONLY, DATA

salma@salma-virtual-machine:~/Desktop/Task1$

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salma@salma-virtual-machine:~/Desktop/Task1\$

salma@salma-virtual-machine:~/Desktop/Task1\$ objdump -h myfile

myfile: file format elf64-x86-64

Sections:

Idx	Name	Size	VMA	LMA	File off	Align
0	.interp	0000001c	0000000000000318	0000000000000318	00000318	2**0
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
1	.note.gnu.property	00000030	0000000000000338	0000000000000338	00000338	2**3
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
2	.note.gnu.build-id	00000024	0000000000000368	0000000000000368	00000368	2**2
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
3	.note.ABI-tag	00000020	000000000000038c	000000000000038c	0000038c	2**2
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
4	.gnu.hash	00000024	00000000000003b0	00000000000003b0	000003b0	2**3
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
5	.dynsym	000000a8	00000000000003d8	00000000000003d8	000003d8	2**3
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
6	.dynstr	0000008f	0000000000000480	0000000000000480	00000480	2**0
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
7	.gnu.version	0000000e	0000000000000510	0000000000000510	00000510	2**1
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
8	.gnu.version_r	00000030	0000000000000520	0000000000000520	00000520	2**3
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
9	.rela.dyn	000000c0	0000000000000550	0000000000000550	00000550	2**3
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
10	.rela.plt	00000018	0000000000000610	0000000000000610	00000610	2**3
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
11	.init	0000001b	0000000000001000	0000000000001000	00001000	2**2
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
12	.plt	00000020	0000000000001020	0000000000001020	00001020	2**4
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
13	.plt.got	00000010	0000000000001040	0000000000001040	00001040	2**4
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
14	.plt.sec	00000010	0000000000001050	0000000000001050	00001050	2**4
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
15	.text	000001a9	0000000000001060	0000000000001060	00001060	2**4
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
16	.fini	0000000d	000000000000120c	000000000000120c	0000120c	2**2
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
17	.rodata	00000018	0000000000002000	0000000000002000	00002000	2**2
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
18	.eh_frame_hdr	0000003c	0000000000002018	0000000000002018	00002018	2**2
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
19	.eh_frame	000000cc	0000000000002058	0000000000002058	00002058	2**3



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7 .gnu.version      CONTENTS, ALLOC, LOAD, READONLY, DATA
0000000e 0000000000000510 0000000000000510 00000510 2**1
8 .gnu.version_r    CONTENTS, ALLOC, LOAD, READONLY, DATA
00000030 0000000000000520 0000000000000520 00000520 2**3
9 .rela.dyn         CONTENTS, ALLOC, LOAD, READONLY, DATA
000000c0 0000000000000550 0000000000000550 00000550 2**3
10 .rela.plt        CONTENTS, ALLOC, LOAD, READONLY, DATA
00000018 0000000000000610 0000000000000610 00000610 2**3
11 .init            CONTENTS, ALLOC, LOAD, READONLY, DATA
0000001b 0000000000001000 0000000000001000 00001000 2**2
12 .plt             CONTENTS, ALLOC, LOAD, READONLY, CODE
00000020 0000000000001020 0000000000001020 00001020 2**4
13 .plt.got         CONTENTS, ALLOC, LOAD, READONLY, CODE
00000010 0000000000001040 0000000000001040 00001040 2**4
14 .plt.sec         CONTENTS, ALLOC, LOAD, READONLY, CODE
00000010 0000000000001050 0000000000001050 00001050 2**4
15 .text            CONTENTS, ALLOC, LOAD, READONLY, CODE
000001a9 0000000000001060 0000000000001060 00001060 2**4
16 .fini            CONTENTS, ALLOC, LOAD, READONLY, CODE
0000000d 000000000000120c 000000000000120c 0000120c 2**2
17 .rodata          CONTENTS, ALLOC, LOAD, READONLY, CODE
00000018 0000000000002000 0000000000002000 00002000 2**2
18 .eh_frame_hdr    CONTENTS, ALLOC, LOAD, READONLY, DATA
0000003c 0000000000002018 0000000000002018 00002018 2**2
19 .eh_frame        CONTENTS, ALLOC, LOAD, READONLY, DATA
000000cc 0000000000002058 0000000000002058 00002058 2**3
20 .init_array       CONTENTS, ALLOC, LOAD, READONLY, DATA
00000008 0000000000003db8 0000000000003db8 00002db8 2**3
21 .fini_array       CONTENTS, ALLOC, LOAD, DATA
00000008 0000000000003dc0 0000000000003dc0 00002dc0 2**3
22 .dynamic          CONTENTS, ALLOC, LOAD, DATA
000001f0 0000000000003dc8 0000000000003dc8 00002dc8 2**3
23 .got              CONTENTS, ALLOC, LOAD, DATA
00000048 0000000000003fb8 0000000000003fb8 00002fb8 2**3
24 .data             CONTENTS, ALLOC, LOAD, DATA
00000024 0000000000004000 0000000000004000 00003000 2**3
25 .bss              CONTENTS, ALLOC, LOAD, DATA
0000000c 0000000000004024 0000000000004024 00003024 2**2
26 .comment          ALLOC
0000002b 0000000000000000 0000000000000000 00003024 2**0
CONTENTS, READONLY

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