1. Symbols

a) Main.o:

0	R	const_variables
0	T	main
0	D	R_ODR

b) Startup.o:

	U	_E_bss
	U	_E_DATA
	U	_E_text
	U	_S_bss
	U	_S_DATA
	U	_stack_top
0	W	Bus_Fault
0	T	Default_Handler
0	W	H_fault_Handler
	U	main
0	W	MM_Fault_Handler
0	W	NMI_Handler
0000000c	T	Reset_Handler
0	W	Usage_Fault_Handler
0	D	vectors

c) Learn_in_depth.elf:

20000004	B	_E_bss
20000004	D	_E_DATA
8000184	T	_E_text
20000004	B	_S_bss
20000000	D	_S_DATA
20001004	B	_stack_top
0800001c	W	Bus_Fault
8000180	T	const_variables

```
0800001c  T        Default_Handler
0800001c  W        H_fault_Handler
080000d8  T        main
0800001c  W        MM_Fault_Handler
0800001c  W        NMI_Handler
20000000  D        R_ODR
 8000028  T        Reset_Handler
0800001c  W        Usage_Fault_Handler
 8000000  T        vectors
0800001c  W        Usage_Fault_Handler
 8000000  T        vectors
```

2. <u>Sections:</u>

```
Idx Name          Size      VMA       LMA       File off  Algn
  0 .text         000000a8  00000000  00000000  00000034  2**2
                  CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
  1 .data         00000004  00000000  00000000  000000dc  2**2
                  CONTENTS, ALLOC, LOAD, DATA
  2 .bss          00000000  00000000  00000000  000000e0  2**0
                  ALLOC
  3 .rodata       00000004  00000000  00000000  000000e0  2**2
                  CONTENTS, ALLOC, LOAD, READONLY, DATA
  4 .debug_info   00000152  00000000  00000000  000000e4  2**0
                  CONTENTS, RELOC, READONLY, DEBUGGING
  5 .debug_abbrev 000000e5  00000000  00000000  00000236  2**0
                  CONTENTS, READONLY, DEBUGGING
  6 .debug_loc    00000038  00000000  00000000  0000031b  2**0
                  CONTENTS, READONLY, DEBUGGING
  7 .debug_aranges 00000020  00000000  00000000  00000353  2**0
                  CONTENTS, RELOC, READONLY, DEBUGGING
  8 .debug_line   000000a3  00000000  00000000  00000373  2**0
                  CONTENTS, RELOC, READONLY, DEBUGGING
  9 .debug_str    0000010b  00000000  00000000  00000416  2**0
                  CONTENTS, READONLY, DEBUGGING
 10 .comment      00000012  00000000  00000000  00000521  2**0
                  CONTENTS, READONLY
 11 .ARM.attributes 00000033  00000000  00000000  00000533  2**0
                  CONTENTS, READONLY
 12 .debug_frame  0000002c  00000000  00000000  00000568  2**2
                  CONTENTS, RELOC, READONLY, DEBUGGING
```

a) <u>Main.o:</u>

```
Idx Name          Size      VMA       LMA       File off  Algn
  0 .text         00000050  00000000  00000000  00000034  2**2
                  CONTENTS, ALLOC, LOAD, READONLY, CODE
```

```
 1 .data         00000000  00000000  00000000  00000084  2**0
                 CONTENTS, ALLOC, LOAD, DATA
 2 .bss          00000000  00000000  00000000  00000084  2**0
                 ALLOC
 3 .debug_info   0000005c  00000000  00000000  00000084  2**0
                 CONTENTS, RELOC, READONLY, DEBUGGING
 4 .debug_abbrev 00000051  00000000  00000000  000000e0  2**0
                 CONTENTS, READONLY, DEBUGGING
 5 .debug_loc    0000002c  00000000  00000000  00000131  2**0
                 CONTENTS, READONLY, DEBUGGING
 6 .debug_aranges 00000020 00000000  00000000  0000015d  2**0
                 CONTENTS, RELOC, READONLY, DEBUGGING
 7 .debug_line   0000003d  00000000  00000000  0000017d  2**0
                 CONTENTS, RELOC, READONLY, DEBUGGING
 8 .debug_str    00000056  00000000  00000000  000001ba  2**0
                 CONTENTS, READONLY, DEBUGGING
 9 .comment      00000012  00000000  00000000  00000210  2**0
                 CONTENTS, READONLY
10 .ARM.attributes 00000032 00000000 00000000  00000222  2**0
                 CONTENTS, READONLY
11 .debug_frame  00000028  00000000  00000000  00000254  2**2
                 CONTENTS, RELOC, READONLY, DEBUGGING
```

b) Startup.o:

```
Idx Name          Size      VMA       LMA       File off  Algn
  0 .text         000000bc  00000000  00000000  00000034  2**2
                  CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
  1 .data         00000000  00000000  00000000  000000f0  2**0
                  CONTENTS, ALLOC, LOAD, DATA
  2 .bss          00000000  00000000  00000000  000000f0  2**0
                  ALLOC
  3 .vectors      0000001c  00000000  00000000  000000f0  2**2
                  CONTENTS, ALLOC, LOAD, RELOC, DATA
  4 .debug_info   00000168  00000000  00000000  0000010c  2**0
                  CONTENTS, RELOC, READONLY, DEBUGGING
  5 .debug_abbrev 000000c2  00000000  00000000  00000274  2**0
                  CONTENTS, READONLY, DEBUGGING
  6 .debug_loc    00000064  00000000  00000000  00000336  2**0
                  CONTENTS, READONLY, DEBUGGING
  7 .debug_aranges 00000020 00000000  00000000  0000039a  2**0
                  CONTENTS, RELOC, READONLY, DEBUGGING
  8 .debug_line   000000ae  00000000  00000000  000003ba  2**0
                  CONTENTS, RELOC, READONLY, DEBUGGING
  9 .debug_str    0000013f  00000000  00000000  00000468  2**0
                  CONTENTS, READONLY, DEBUGGING
 10 .comment      00000012  00000000  00000000  000005a7  2**0
                  CONTENTS, READONLY
 11 .ARM.attributes 00000033 00000000 00000000  000005b9  2**0
                  CONTENTS, READONLY
 12 .debug_frame  0000004c  00000000  00000000  000005ec  2**2
                  CONTENTS, RELOC, READONLY, DEBUGGING
```

c) Learn_in_depth.elf:

```
Idx Name          Size      VMA       LMA       File off  Algn
  0 .text         00000184  08000000  08000000  00008000  2**2
                  CONTENTS, ALLOC, LOAD, READONLY, CODE
  1 .data         00000004  20000000  08000184  00010000  2**2
                  CONTENTS, ALLOC, LOAD, DATA
  2 .bss          00001000  20000004  08000188  00010004  2**0
                  ALLOC
  3 .debug_info   000002ba  00000000  00000000  00010004  2**0
                  CONTENTS, READONLY, DEBUGGING
  4 .debug_abbrev 000001a7  00000000  00000000  000102be  2**0
                  CONTENTS, READONLY, DEBUGGING
  5 .debug_loc    0000009c  00000000  00000000  00010465  2**0
                  CONTENTS, READONLY, DEBUGGING
  6 .debug_aranges 00000040  00000000  00000000  00010501  2**0
                  CONTENTS, READONLY, DEBUGGING
  7 .debug_line   00000151  00000000  00000000  00010541  2**0
                  CONTENTS, READONLY, DEBUGGING
  8 .debug_str    0000014f  00000000  00000000  00010692  2**0
                  CONTENTS, READONLY, DEBUGGING
  9 .comment      00000011  00000000  00000000  000107e1  2**0
                  CONTENTS, READONLY
 10 .ARM.attributes 00000033  00000000  00000000  000107f2  2**0
                  CONTENTS, READONLY
 11 .debug_frame  00000078  00000000  00000000  00010828  2**2
                  CONTENTS, READONLY, DEBUGGING
```