

## Embedded C lesson2 Report

### • app.o sections

Idx	Name	Size	VMA	LMA	File off	Algn
0	.text	00000018	00000000	00000000	00000034	2**2
	CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE					
1	.data	00000064	00000000	00000000	0000004c	2**2
	CONTENTS, ALLOC, LOAD, DATA					
2	.bss	00000000	00000000	00000000	000000b0	2**0
	ALLOC					
3	.comment	00000012	00000000	00000000	000000b0	2**0
	CONTENTS, READONLY					
4	.ARM.attributes	00000032	00000000	00000000	000000c2	2**0
	CONTENTS, READONLY					

### • uart.o sections

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	.comment	00000012	00000000	00000000	00000084	2**0
	CONTENTS, READONLY					
4	.ARM.attributes	00000032	00000000	00000000	00000096	2**0
	CONTENTS, READONLY					

### • Full contents of app.o

```
Contents of section .text:
0000 00482de9 04b08de2 04009fe5 feffffeb .H-.....
0010 0088bde8 00000000 .....

Contents of section .data:
0000 4c656172 6e2d696e 2d646570 7468203a Learn-in-depth :
0010 203c4162 64616c6c 613e0000 00000000 <Abdalla>.....
0020 00000000 00000000 00000000 00000000 .....
0030 00000000 00000000 00000000 00000000 .....
0040 00000000 00000000 00000000 00000000 .....
0050 00000000 00000000 00000000 00000000 .....
0060 00000000 ....

Contents of section .comment:
0000 00474343 3a202847 4e552920 342e372e .GCC: (GNU) 4.7.
0010 3200 2.

Contents of section .ARM.attributes:
0000 41310000 00616561 62690001 27000000 A1...aeabi..'...
0010 0541524d 39323645 4a2d5300 06050801 .ARM926EJ-S.....
0020 09011204 14011501 17031801 19011a01 .....
0030 1e06
```

- **Startup.o sections**

```
Sections:
Idx Name          Size      VMA       LMA       File off  Algn
  0 .text          0000000c  00000000  00000000  00000034  2**2
    CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
  1 .data          00000000  00000000  00000000  00000040  2**0
    CONTENTS, ALLOC, LOAD, DATA
  2 .bss           00000000  00000000  00000000  00000040  2**0
    ALLOC
  3 .ARM.attributes 00000022  00000000  00000000  00000040  2**0
    CONTENTS, READONLY
```

- **Symbols of app.o**

```
00000000 T main
00000000 D String_Buffer
          U Uart_Send_String
```

- **Symbols of uart.o**

```
00000000 T Uart_Send_String
```

- **Symbols of .elf file**

```
00010010 T main
00010000 T reset
000110dc D stack_top
00010008 t stop
00010078 D String_Buffer
00010028 T Uart_Send_String
```

- **Sections of .elf file**

```
Idx Name          Size      VMA       LMA       File off  Algn
  0 .startup        00000010  00010000  00010000  00008000  2**2
    CONTENTS, ALLOC, LOAD, READONLY, CODE
  1 .text           00000068  00010010  00010010  00008010  2**2
    CONTENTS, ALLOC, LOAD, READONLY, CODE
  2 .data           00000064  00010078  00010078  00008078  2**2
    CONTENTS, ALLOC, LOAD, DATA
  3 .ARM.attributes 0000002e  00000000  00000000  000080dc  2**0
    CONTENTS, READONLY
  4 .comment         00000011  00000000  00000000  0000810a  2**0
    CONTENTS, READONLY
```