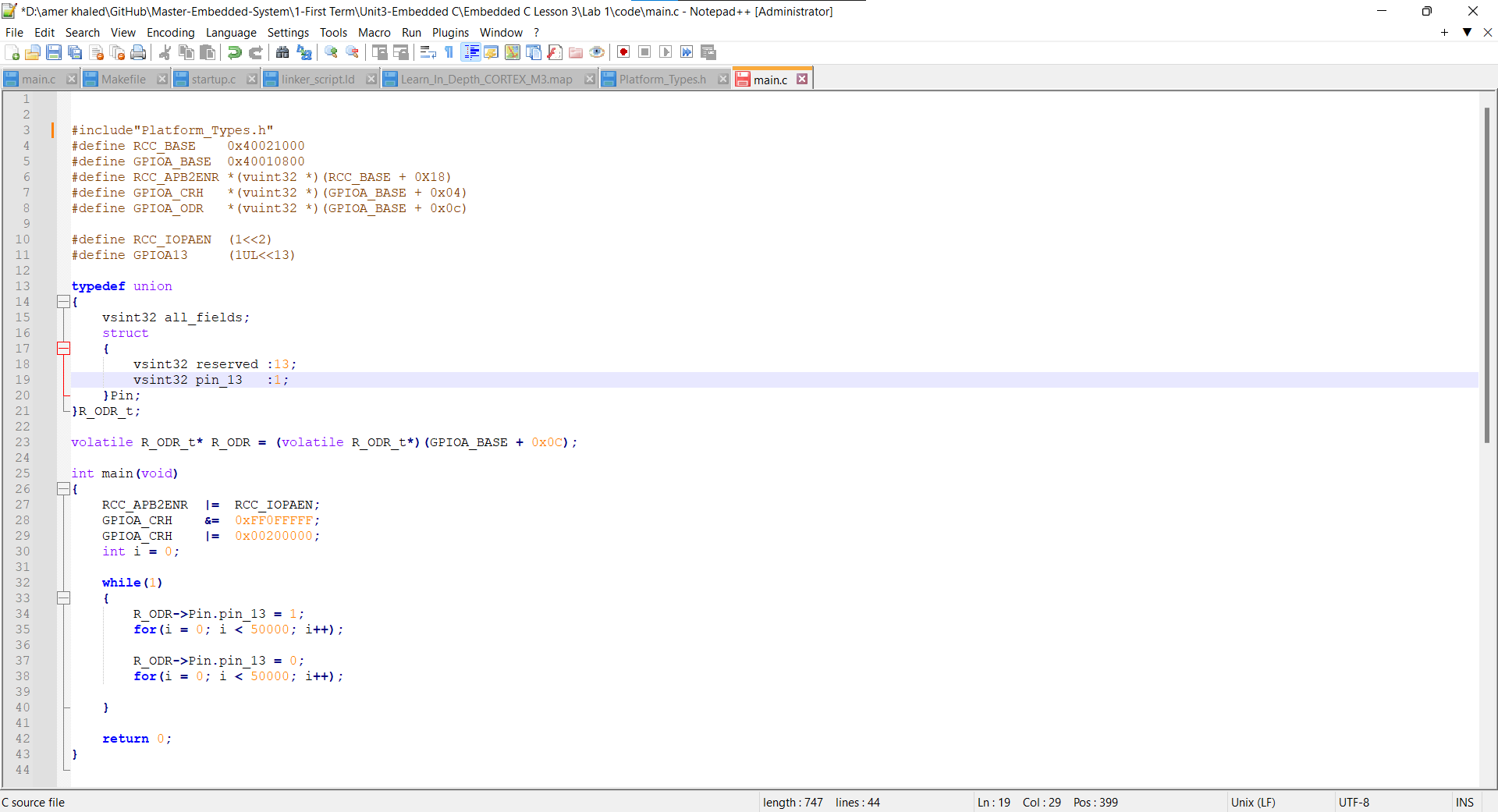
Learn-In-Depth

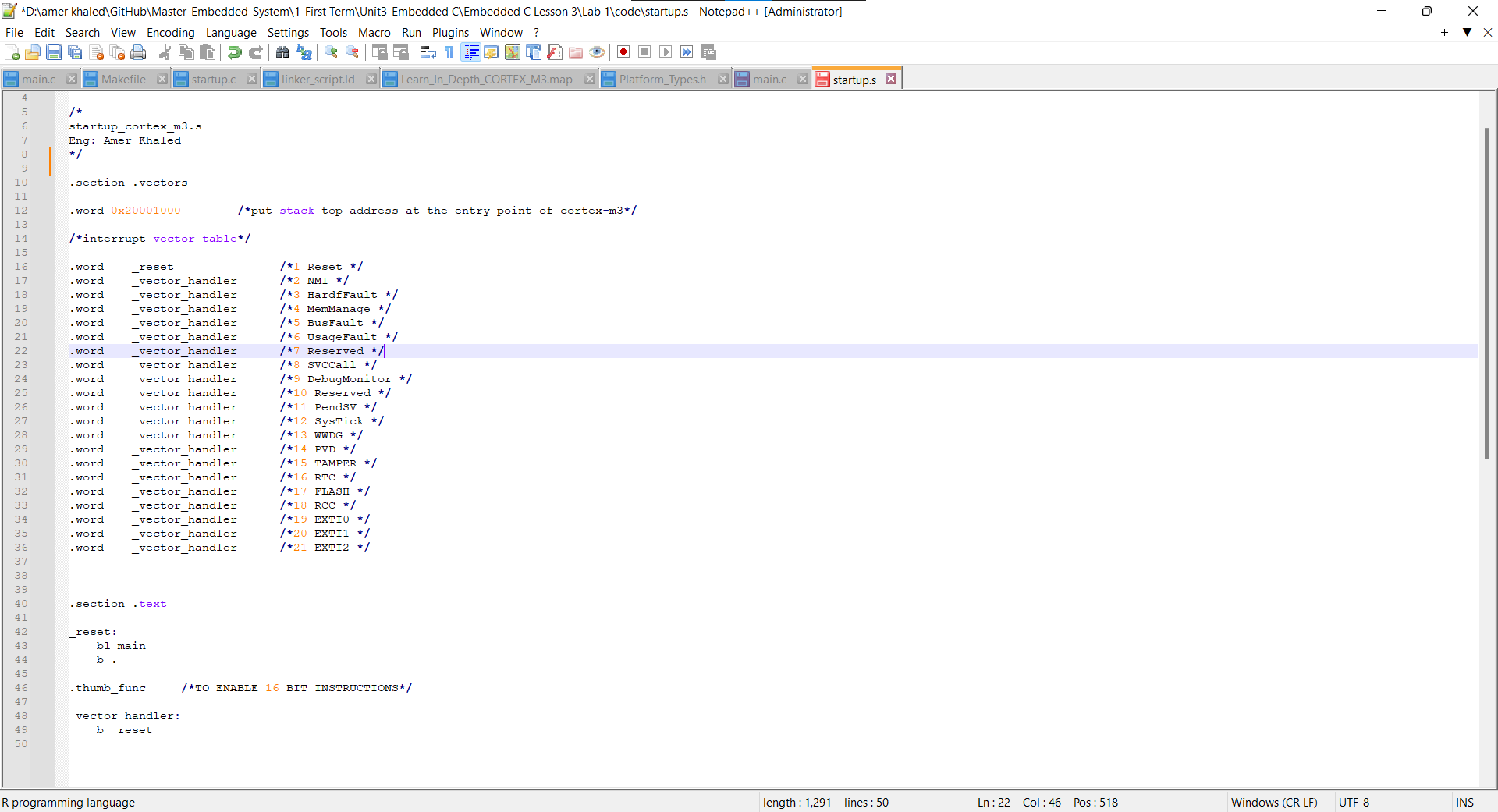
Report Lab1

Eng: Amer Khaled

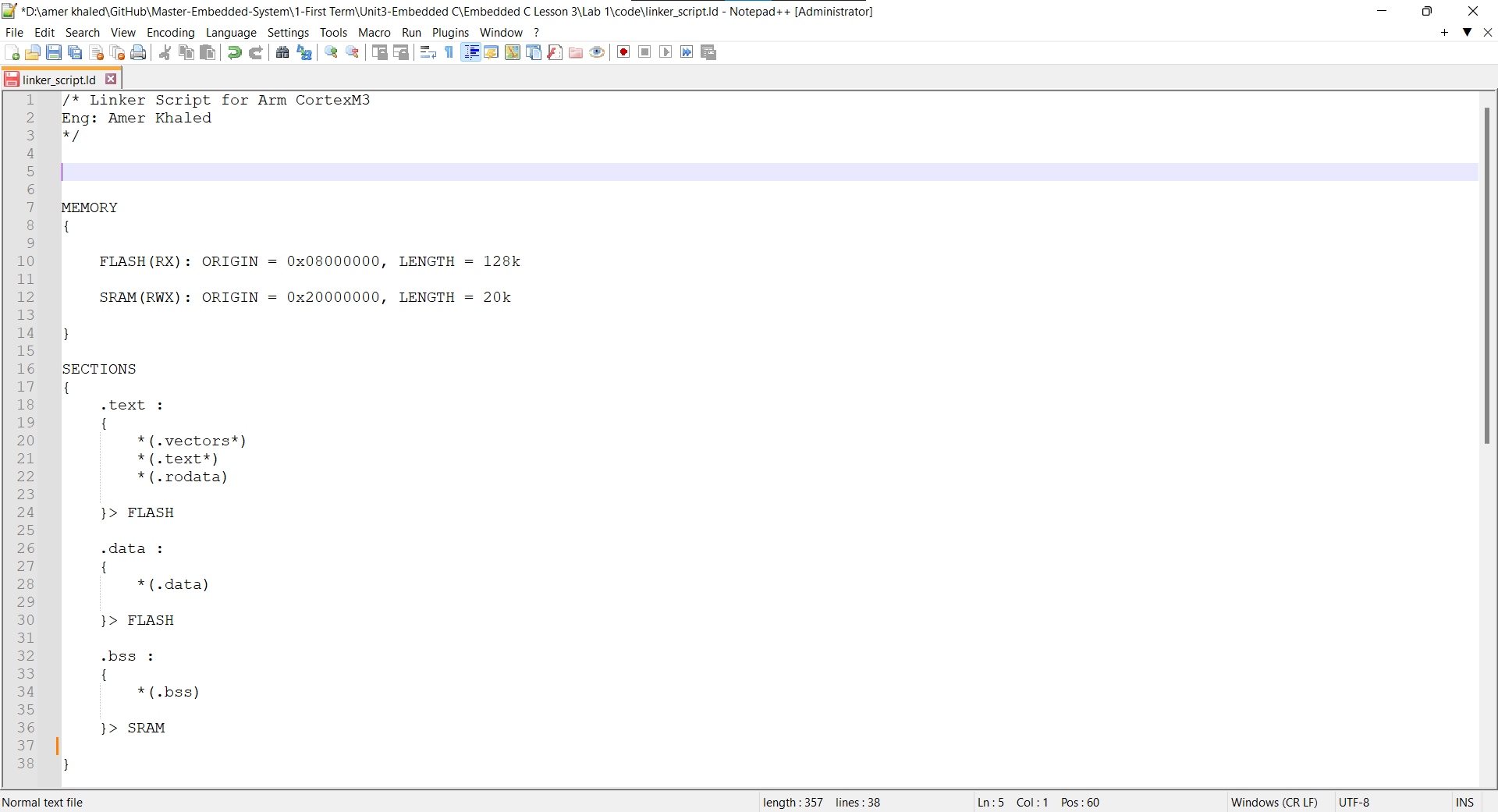
Main.c



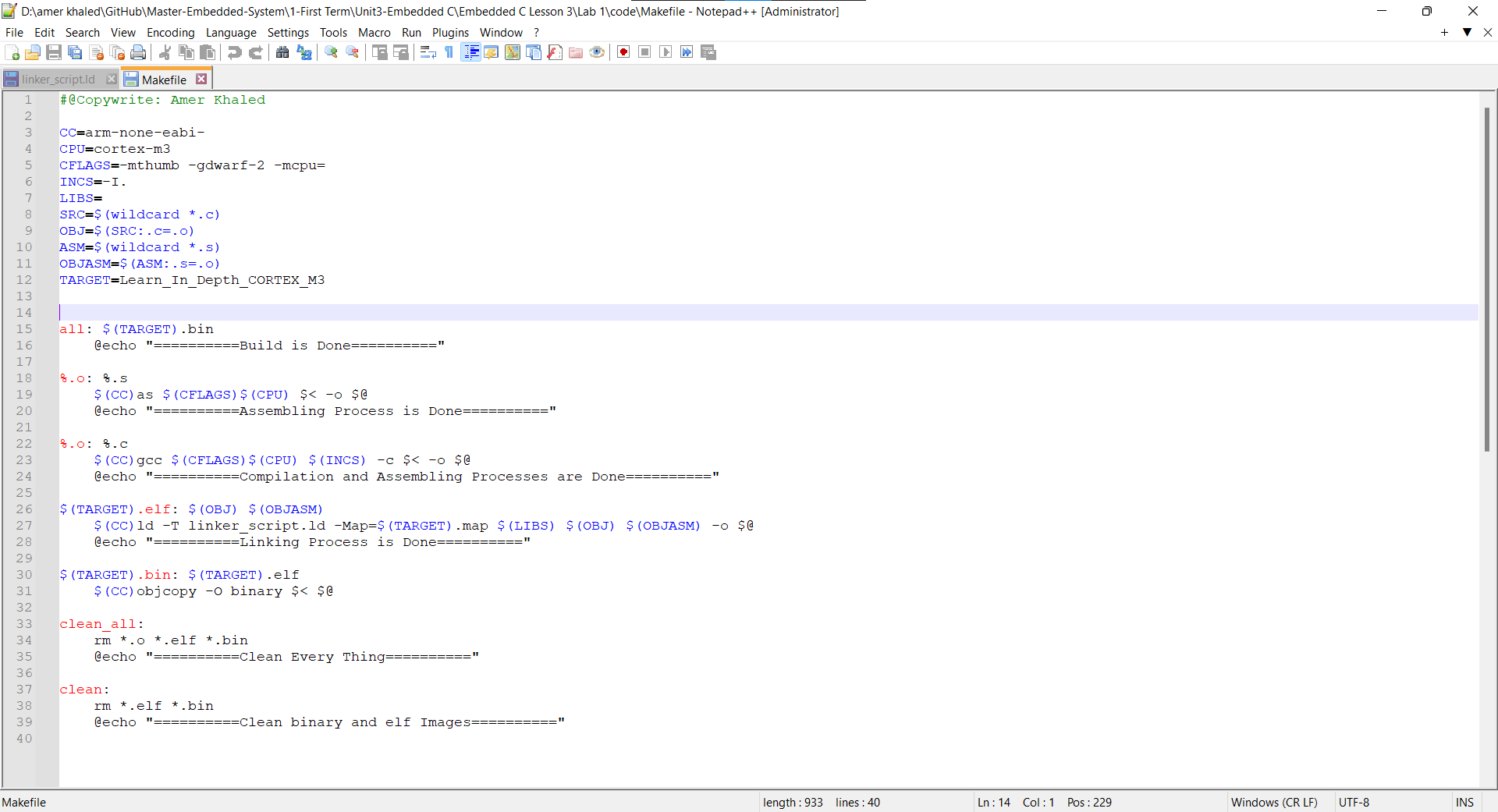
Startup.s



Linker\_script.ld



Makefile



main.o: file format elf32-littlearm

Sections:

Idx Name Size VMA LMA File off Algn

0 .text 000000b0 00000000 00000000 00000034 2\*\*2

CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE

1 .data 00000004 00000000 00000000 000000e4 2\*\*2

CONTENTS, ALLOC, LOAD, DATA

2 .bss 00000000 00000000 00000000 000000e8 2\*\*0

ALLOC

3 .debug\_info 00000137 00000000 00000000 000000e8 2\*\*0

CONTENTS, RELOC, READONLY, DEBUGGING

4 .debug\_abbrev 000000cc 00000000 00000000 0000021f 2\*\*0

CONTENTS, READONLY, DEBUGGING

5 .debug\_loc 00000038 00000000 00000000 000002eb 2\*\*0

CONTENTS, READONLY, DEBUGGING

6 .debug\_aranges 00000020 00000000 00000000 00000323 2\*\*0

CONTENTS, RELOC, READONLY, DEBUGGING

7 .debug\_line 0000006b 00000000 00000000 00000343 2\*\*0

CONTENTS, RELOC, READONLY, DEBUGGING

8 .debug\_str 00000139 00000000 00000000 000003ae 2\*\*0

CONTENTS, READONLY, DEBUGGING

9 .comment 00000012 00000000 00000000 000004e7 2\*\*0

CONTENTS, READONLY

10 .ARM.attributes 00000033 00000000 00000000 000004f9 2\*\*0

CONTENTS, READONLY

11 .debug\_frame 0000002c 00000000 00000000 0000052c 2\*\*2

CONTENTS, RELOC, READONLY, DEBUGGING

startup.o: file format elf32-littlearm

Sections:

Idx Name Size VMA LMA File off Algn

0 .text 00000008 00000000 00000000 00000034 2\*\*1

CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE

1 .data 00000000 00000000 00000000 0000003c 2\*\*0

CONTENTS, ALLOC, LOAD, DATA

2 .bss 00000000 00000000 00000000 0000003c 2\*\*0

ALLOC

3 .vectors 00000058 00000000 00000000 0000003c 2\*\*0

CONTENTS, RELOC, READONLY

4 .ARM.attributes 00000021 00000000 00000000 00000094 2\*\*0

CONTENTS, READONLY

5 .debug\_line 0000003b 00000000 00000000 000000b5 2\*\*0

CONTENTS, RELOC, READONLY, DEBUGGING

6 .debug\_info 0000009c 00000000 00000000 000000f0 2\*\*0

CONTENTS, RELOC, READONLY, DEBUGGING

7 .debug\_abbrev 00000014 00000000 00000000 0000018c 2\*\*0

CONTENTS, READONLY, DEBUGGING

8 .debug\_aranges 00000020 00000000 00000000 000001a0 2\*\*3

CONTENTS, RELOC, READONLY, DEBUGGING

Learn\_In\_Depth\_CORTEX\_M3.elf: file format elf32-littlearm

Sections:

Idx Name Size VMA LMA File off Algn

0 .text 00000110 08000000 08000000 00008000 2\*\*2

CONTENTS, ALLOC, LOAD, READONLY, CODE

1 .data 00000004 08000110 08000110 00008110 2\*\*2

CONTENTS, ALLOC, LOAD, DATA

2 .debug\_info 000001d3 00000000 00000000 00008114 2\*\*0

CONTENTS, READONLY, DEBUGGING

3 .debug\_abbrev 000000e0 00000000 00000000 000082e7 2\*\*0

CONTENTS, READONLY, DEBUGGING

4 .debug\_loc 00000038 00000000 00000000 000083c7 2\*\*0

CONTENTS, READONLY, DEBUGGING

5 .debug\_aranges 00000040 00000000 00000000 00008400 2\*\*3

CONTENTS, READONLY, DEBUGGING

6 .debug\_line 000000a6 00000000 00000000 00008440 2\*\*0

CONTENTS, READONLY, DEBUGGING

7 .debug\_str 00000118 00000000 00000000 000084e6 2\*\*0

CONTENTS, READONLY, DEBUGGING

8 .comment 00000011 00000000 00000000 000085fe 2\*\*0

CONTENTS, READONLY

9 .ARM.attributes 00000031 00000000 00000000 0000860f 2\*\*0

CONTENTS, READONLY

10 .debug\_frame 0000002c 00000000 00000000 00008640 2\*\*2

CONTENTS, READONLY, DEBUGGING

Mapfile:

Memory Configuration

Name Origin Length Attributes

FLASH 0x08000000 0x00020000 xr

SRAM 0x20000000 0x00005000 xrw

\*default\* 0x00000000 0xffffffff

Linker script and memory map

.text 0x08000000 0x110

\*(.vectors\*)

.vectors 0x08000000 0x58 startup.o

\*(.text\*)

.text 0x08000058 0xb0 main.o

0x08000058 main

.text 0x08000108 0x8 startup.o

\*(.rodata)

.glue\_7 0x08000110 0x0

.glue\_7 0x00000000 0x0 linker stubs

.glue\_7t 0x08000110 0x0

.glue\_7t 0x00000000 0x0 linker stubs

.vfp11\_veneer 0x08000110 0x0

.vfp11\_veneer 0x00000000 0x0 linker stubs

.v4\_bx 0x08000110 0x0

.v4\_bx 0x00000000 0x0 linker stubs

.iplt 0x08000110 0x0

.iplt 0x00000000 0x0 main.o

.rel.dyn 0x08000110 0x0

.rel.iplt 0x00000000 0x0 main.o

.data 0x08000110 0x4

\*(.data)

.data 0x08000110 0x4 main.o

0x08000110 R\_ODR

.data 0x08000114 0x0 startup.o

.igot.plt 0x08000114 0x0

.igot.plt 0x00000000 0x0 main.o

.bss 0x20000000 0x0

\*(.bss)

.bss 0x20000000 0x0 main.o

.bss 0x20000000 0x0 startup.o

LOAD main.o

LOAD startup.o

OUTPUT(Learn\_In\_Depth\_CORTEX\_M3.elf elf32-littlearm)

.debug\_info 0x00000000 0x1d3

.debug\_info 0x00000000 0x137 main.o

.debug\_info 0x00000137 0x9c startup.o

.debug\_abbrev 0x00000000 0xe0

.debug\_abbrev 0x00000000 0xcc main.o

.debug\_abbrev 0x000000cc 0x14 startup.o

.debug\_loc 0x00000000 0x38

.debug\_loc 0x00000000 0x38 main.o

.debug\_aranges 0x00000000 0x40

.debug\_aranges

0x00000000 0x20 main.o

.debug\_aranges

0x00000020 0x20 startup.o

.debug\_line 0x00000000 0xa6

.debug\_line 0x00000000 0x6b main.o

.debug\_line 0x0000006b 0x3b startup.o

.debug\_str 0x00000000 0x118

.debug\_str 0x00000000 0x118 main.o

0x139 (size before relaxing)

.comment 0x00000000 0x11

.comment 0x00000000 0x11 main.o

0x12 (size before relaxing)

.ARM.attributes

0x00000000 0x31

.ARM.attributes

0x00000000 0x33 main.o

.ARM.attributes

0x00000033 0x21 startup.o

.debug\_frame 0x00000000 0x2c

.debug\_frame 0x00000000 0x2c main.o

