Main.o sections

```
MINGW64:/d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLOMAS/KSESDiplo...
AS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
 arm-none-eabi-objdump.exe -h app.o
           file format elf32-littlearm
app.o:
Sections:
Idx Name
                                        LMA
                                                   File off
                                                             Algn
                   Size
                             VMA
  0 .text
                   00000028
                             00000000 00000000
                                                  00000034
                                                             2**2
                   CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
                   00000004 00000000 00000000 0000005c
  1 .data
                                                             2**2
                  CONTENTS, ALLOC, LOAD, RELOC, DATA
                   00000000 00000000 00000000 00000060
  2 .bss
                                                             2**0
                   ALLOC
                   0000001e 00000000 00000000 00000060
                                                             2**2
  rodata
                  CONTENTS, ALLOC, LOAD, READONLY, DATA 0000007f 00000000 00000000 0000007e
  4 .comment
                                                             2**0
                  CONTENTS, READONLY
  5 .ARM.attributes 00000032 00000000 00000000 000000fd 2**0
                  CONTENTS, READONLY
```

• Startup.o sections

```
MINGW64:/d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLOMAS/KSESDiplo...
abdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLO
MAS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
$ arm-none-eabi-objdump.exe -h startup.o
                 file format elf32-littlearm
startup.o:
Sections:
Idx Name
                                                       File off
                    size
                                VMA
                                            LMA
                                                                   Algn
                    0000000c 00000000 00000000 00000034
                                                                   2**2
                    CONTENTS, ALLOC, LOAD, RELOC, READONLY, CODE
                    00000000 00000000 00000000 00000040
  1 .data
                    CONTENTS, ALLOC, LOAD, DATA 00000000 00000000 00000000 00000040 2**0
  2 .bss
                    ALLOC
  3 .ARM.attributes 00000022 00000000 00000000 00000040 2**0
                    CONTENTS, READONLY
abdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLOMAS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
  arm-none-eabi-objdump.exe -h uart.o
```

• UART.o sections

```
MINGW64;/d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLOMAS/KSESDiplo...
abdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLO
MAS/KSESDip]oma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
$ arm-none-eabi-objdump.exe -h uart.o
uart.o:
            file format elf32-littlearm
Sections:
Idx Name
                                                  File off
                   Size
                             VMA
                                        LMA
                                                             Algn
  0 .text
                  00000054
                             00000000
                                       00000000
                                                  00000034
                  CONTENTS, ALLOC, LOAD, READONLY, CODE 00000000 00000000 00000008
                                                             2**0
  1 .data
                  CONTENTS, ALLOC, LOAD, DATA
  2 .bss
                   00000000 00000000 00000000
                                                  00000088
                                                             2**0
                   ALLOC
                  0000007f
  3 .comment
                             00000000 00000000
                                                  00000088 2**0
                   CONTENTS, READONLY
  4 .ARM.attributes 00000032 00000000 00000000 00000107 2**0
                  CONTENTS, READONLY
MAS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master •
```

application.elf sections

```
MINGW64:/d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLOMAS/KSESDiplo...
MAS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
$ arm-none-eabi-objdump.exe -h application.elf
application.elf:
                       file format elf32-littlearm
Sections:
Idx Name
                                                     File off Algn
                    size
                                          LMA
                               VMA
  0 .startup_section 0000000c 00010000 00010000 00010000 2**2
                    CONTENTS, ALLOC, LOAD, READONLY, CODE
  1 .text_section 0000007c 0001000c 0001000c 0001000c
                    CONTENTS, ALLOC, LOAD, READONLY, CODE
  2 .rodata 0000001e 00010088 00010088 00010088 CONTENTS, ALLOC, LOAD, READONLY, DATA 3 .data_section 00000004 000100a8 000100a8 000100a8
                                                                2**2
                    CONTENTS, ALLOC, LOAD, DATA
  4 .ARM.attributes 0000002e 00000000 00000000 000100ac 2**0
                    CONTENTS, READONLY
                    0000007e 00000000
                                          00000000 000100da 2**0
  5 .comment
                    CONTENTS, READONLY
```

• Symbols

```
MINGW64:/d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLOMAS/KSESDiplo...
bdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLO
AS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
 arm-none-eabi-nm.exe app.o
0000000 D data
00000000 T main
         U uart_send_string
AS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
 arm-none-eabi-nm.exe startup.o
         U main
00000000 T reset
00000008 t stop
Abdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLO NAS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
 arm-none-eabi-nm.exe uart.o
)00000000 T uart_send_string
bdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLO
AS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
 arm-none-eabi-nm.exe application.elf
000100a8 D data
0001000c T main
00010000 T reset
00110ac D stack_pointer
00010008 t stop
00010034 T uart_send_string
abdul@Administrator MINGW64 /d/Courses/programming/NOW/EmbeddedSystems/Now/DIPLO
AS/KSESDiploma/5.Assignments/Unit 3 (Embedded C)/Lecture 2/assignment 1 (master
```

• Simulation

