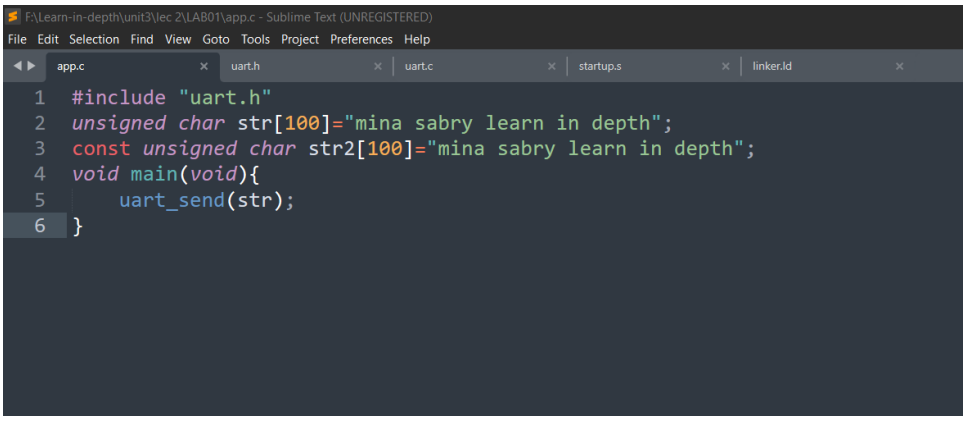
Name: Mina Sabry Abdelmessih

ID:686876

CODES:

App.c



Uart.h

F:\Learn-in-depth\unit3\lec 2\LAB01\uart.h - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

app.c | uart.h | uart.c | startup.s | link

```
1  #ifndef _UART_H_
2  #define _UART_H_
3  void uart_send(unsigned char* p);
4  #endif
```

Uart.c

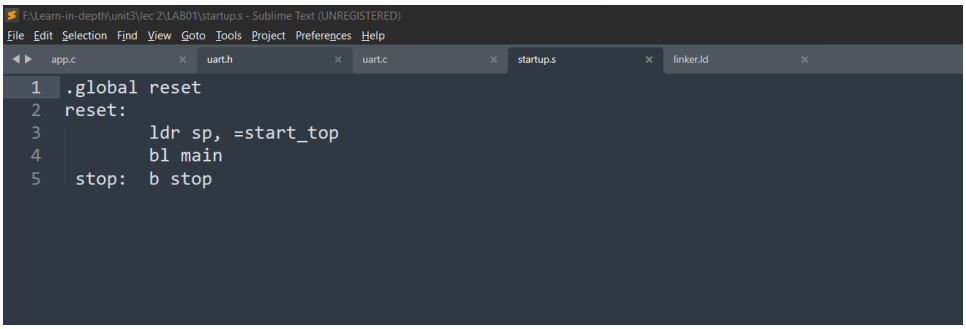
F:\Learn-in-depth\unit3\lec 2\LAB01\uart.c - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

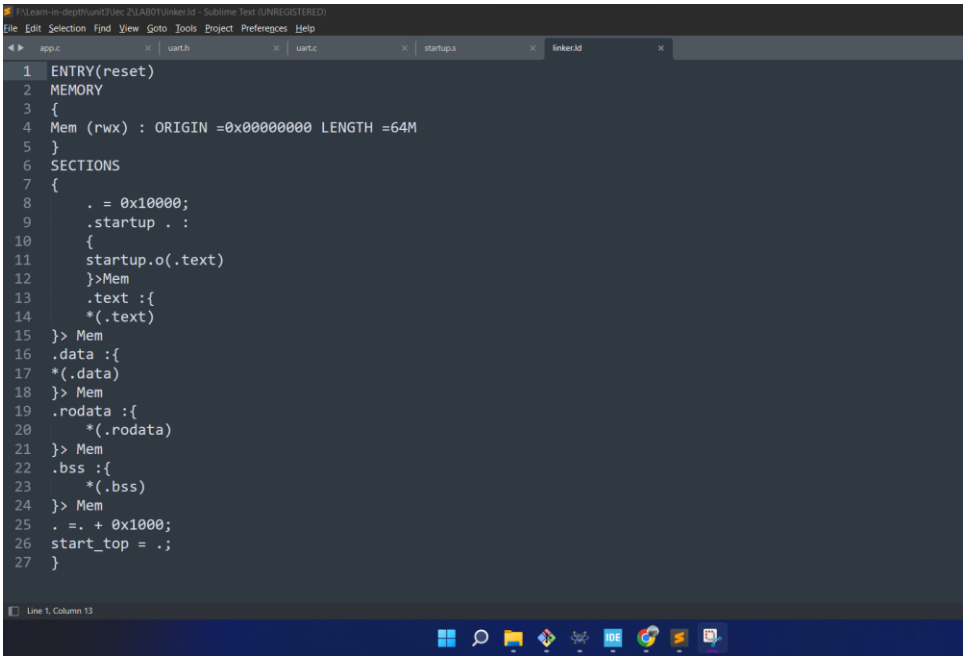
app.c | uart.h | uart.c | startup.s | linker.ld

```
1  #include "uart.h"
2  #define UARt0DR *((volatile unsigned int *)((unsigned int*)0x101f1000))
3  void uart_send(unsigned char* p){
4  while(*p != '\0'){
5      UARt0DR=(unsigned int)(*p);
6      p++;
7  }
8
9  }
```

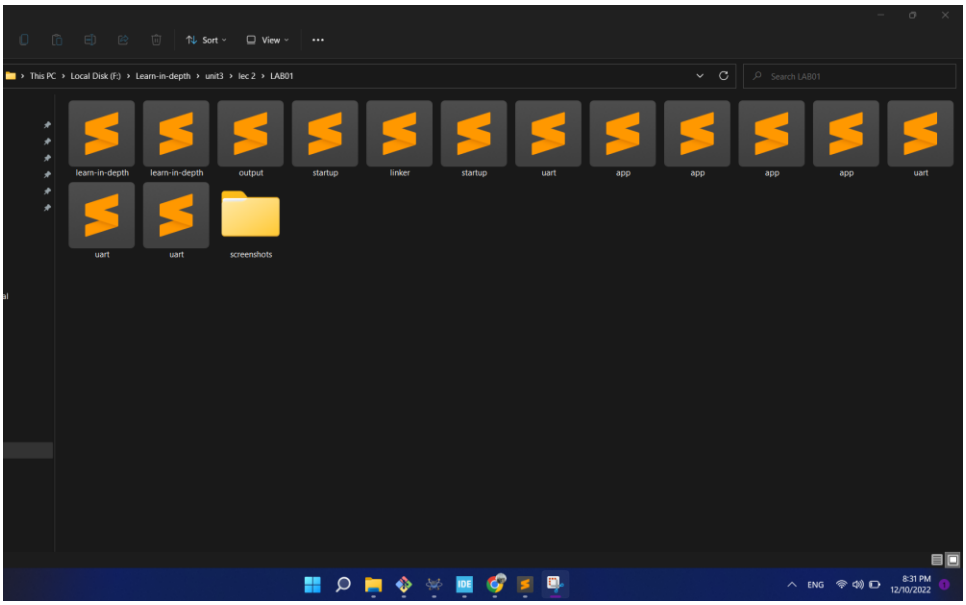
Startup.s



Linker.ld



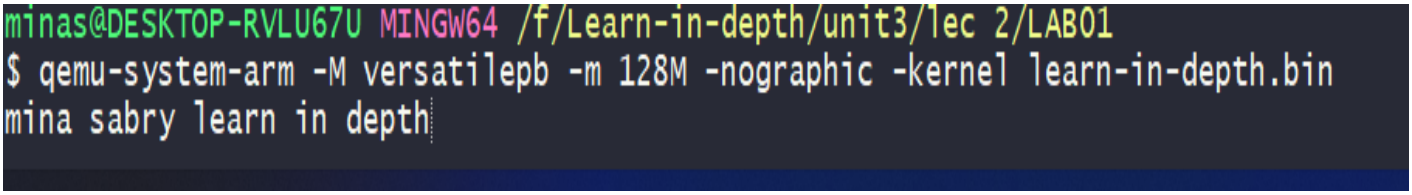
ALL



RUN

```
minas@DESKTOP-RVLU67U MINGW64 /f/Learn-in-depth/unit3/lec 2/LAB01
$ arm-none-eabi-objdump.exe -h learn-in-depth.elf

learn-in-depth.elf:     file format elf32-littlearm

Sections:
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 .rodata       00000064  000100dc  000100dc  000080dc  2**2
                  CONTENTS, ALLOC, LOAD, READONLY, DATA
  4 .ARM.attributes 0000002e  00000000  00000000  00008140  2**0
                  CONTENTS, READONLY
  5 .comment      00000011  00000000  00000000  0000816e  2**0
                  CONTENTS, READONLY
```

```
$ arm-none-eabi-objdump.exe -h learn-in-depth.elf

learn-in-depth.elf:     file format elf32-littlearm

Sections:
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 .rodata       00000064  000100dc  000100dc  000080dc  2**2
                  CONTENTS, ALLOC, LOAD, READONLY, DATA
  4 .ARM.attributes 0000002e  00000000  00000000  00008140  2**0
                  CONTENTS, READONLY
  5 .comment      00000011  00000000  00000000  0000816e  2**0
```