REQUIREMENTS NOT MET

N/A

PROBLEMS ENCOUNTERED

N/A

FUTURE WORK/APPLICATIONS

EBI allows us to attach external peripherals to our microcontroller by mapping the peripheral to an address space.
This allows us to attach external memory, external inputs, external outputs, etc.
This is incredibly useful, as we can now use our microcontroller to control anything we so desire.

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PRE-LAB EXERCISES

i. For each SRAM configuration within the EBI system of the ATxmega128A1U microcontroller, to which address lines do you have external, physical access? Additionally, for the SRAM 3-PORT ALE1 configuration, is it possible to have external, physical access to any address lines above A15? Why or why not?

Normal SRAM Configuration:

No multiplexing:

Address lines 0 through 21

Multiplexing byte 0 and 1:

If ALE 1 is false, address lines 0 through 7 along with address lines 16 through 19.

If ALE 1 is true, address lines 0 through 15 along with 16 through 19 are available.

Multiplexing byte 0 and 2:

If ALE2 is false, address lines 0 through 15.

If ALE2 is true, address lines 0 through 23 are available.

Multiplexing byte 0,1 and 2:

If both ALE1 and ALE2 are false, address lines 0 through 7 are available.

If ALE1 is true and ALE2 is false, address lines 0 through 15 are available.

If ALE1 is true and ALE2 is true, address lines 0 through 23 are available.

LPC SRAM Configuration:

Multiplexing byte 0:

If ALE1 is false, address lines 8 through 19 are available.

Multiplexing byte 0 and 1:

If ALE1 and ALE2 are false, address lines 16 through 19 are available.

If ALE1 is true and ALE2 is false, address lines 0 through 7 along with 16 through 19 are available.

If ALE1 and ALE2 are true, address lines 0 through 19 are available to you.

It is possible to access address lines above A15, but only if at least 1 chip select line isn't used.

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ii. Describe what performing full address decoding and partial address decoding signifies. Provide examples of both types for [1] an SRAM chip and [2] either an input port or output port.

> An address consists of two parts:
> 1. Actual memory address
> 2. Chip select lines
> Full address decoding means you use all of the chip select lines.
> Partial address decoding means you use a portion of the chip select lines
>
> SRAM example:
> You have a 10 bit address that you use to load/store data in a 1k byte SRAM. The SRAM is split into four smaller SRAM's that are 250 bytes each.
> With full address decoding, you would allocate the first 2 bits to select the SRAM chip, then you would use the rest of the bits to select the specific byte in the SRAM chip.
> With partial address decoding, where you aren't allowed to access the lower two chips, you would ignore the 9th bit, and use the 8th bit to address the SRAM chip. You would then use the rest of the bits to address the specific byte.
>
> GPIO example:

iii. In theory, how many 8-bit I/O ports could be mapped to the external data memory space of an ATxmega128A1U microcontroller, assuming that at most one port utilizes any particular address range? Explain your answer, utilizing your response from Exercise ii.

> 16 million I/O ports could be mapped.
>
> The EBI can support up to 16MB of SRAM.
> The address size for the EBI can go up to 24 bits.
> However, the first 16k addresses are reserved for internal SRAM
> that's 0xFFFFFF – 0x004000 = 0xFFBFFF(16,760,831) possible ports

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iv. Assume that an SRAM component with the same size as the one on the OOTB Memory Base has to be added to a different computing system containing an ATxmega128A1U but no OOTB Memory Base (i.e., this is not the OOTB µPAD computing system), with the first address of the SRAM starting at address 0x42 4000, instead of the address specified in the "Lab 4 – Hardware Expansion" quiz. Design, on paper, a hardware expansion for this new system, utilizing the same structure of steps laid out in this quiz. Use the same "overall" memory-mapping constraints presented within the quiz.

Figure 1: EBI expansion with address starting at 0x424000.
The SRAM needs to be split because the 32k SRAM is bigger than the boundary.

v. Assume that some external 128 KB SRAM must be fully mapped to the data memory space of the ATxmega128A1U, with the first memory location of the SRAM corresponding to data memory address 0x7A 0000. Design, on paper, a hardware expansion for this new system, utilizing the same structure of steps laid out in the relevant pre-lab quiz. Use the same "overall" memory-mapping con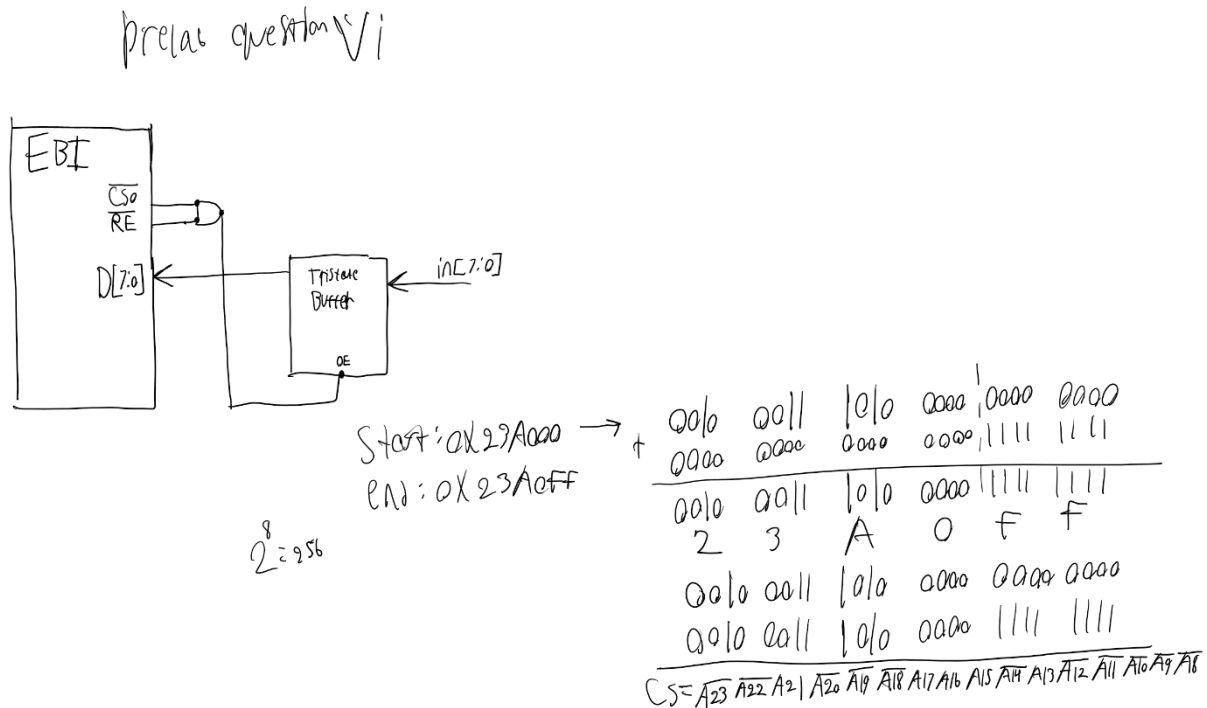straints presented within this quiz. Hint: Consider how many address signals are needed to make the SRAM fully addressable, and then consider how you will gain access to all these signals.
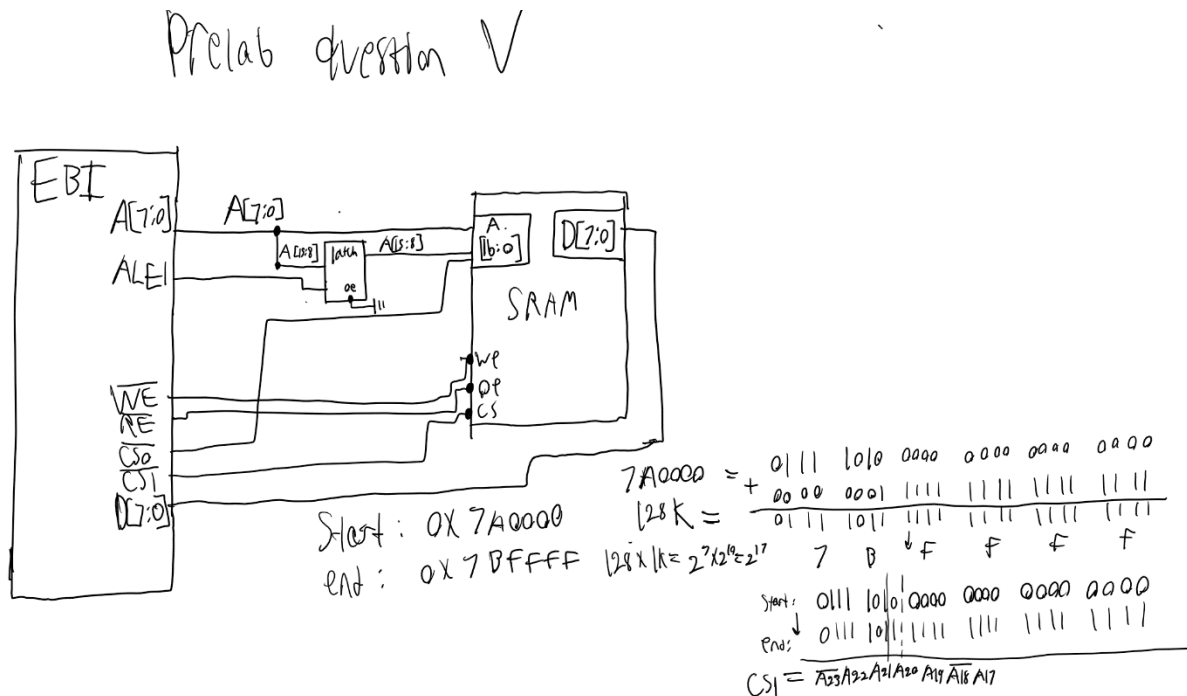
Figure 2: EBI expansion with address starting at 0x7A0000.
Since an extra bit is required, CS0 is used as an address line.

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vi. Assume that some 8-bit input port should be accessible via the 256 consecutive addresses starting at 0x23 A000 within the ATxmega128A1U data memory space. Design, on paper, a hardware expansion for this port, utilizing the same structure of steps laid out in the relevant pre-lab quiz. Use the same "overall" memory-mapping constraints presented within this quiz.

Figure 3: EBI expansion starting at address 0x23A000.

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vii. Assume that some external 1 MB SRAM must be fully mapped to the data memory space of the ATxmega128A1U, with the first memory location of the SRAM corresponding to data memory address 0x60 0000. Design, on paper, a hardware expansion for this new system, utilizing the same structure of steps laid out in the relevant pre-lab quiz. Use the same "overall" memory-mapping constraints presented within this quiz, except that which is concerning the usage of the SRAM 3-PORT ALE1 EBI configuration. Hint: you might consider the use of some other EBI configuration.
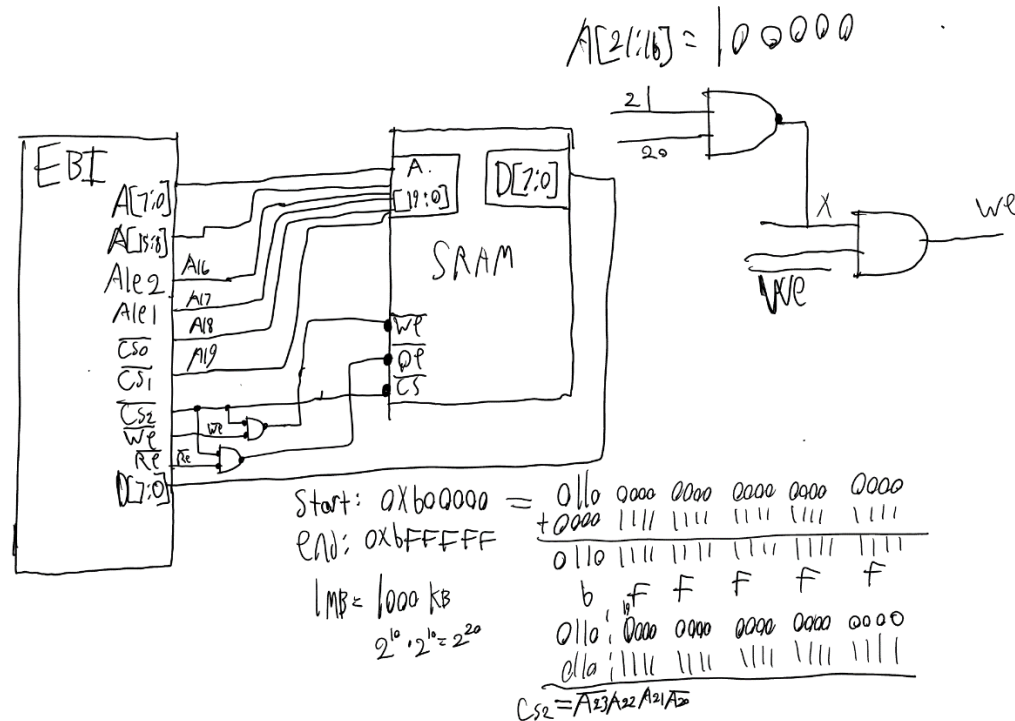

Figure 4: 1 MB SRAM expansion. This configuration uses 4 port no ALE. Allowing ALE1 and ALE2 to be used as address lines 16 and 17, and CS0 and CS1 to be used as address 18 and address 19.

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viii. How would one go about utilizing the SRAM 4PORT NOALE mode? (Note: Looking at the Alternate Pin Functions only ports H, J, and K by default can be used with the EBI system. How can the other port be activated)?

For 4 port mode:
1.Initialize the EBI to 4 port no ALE by loading 0b00001110 into EBICTRL

2. Set the EBI's 4th port to:
Port E by setting Port E as an output register, and loading 0b00000100 into Port E's EBIOUT register
or
Port F by setting Port F as an output register, and loading 0b00000000 into Port F's EBIOUT register
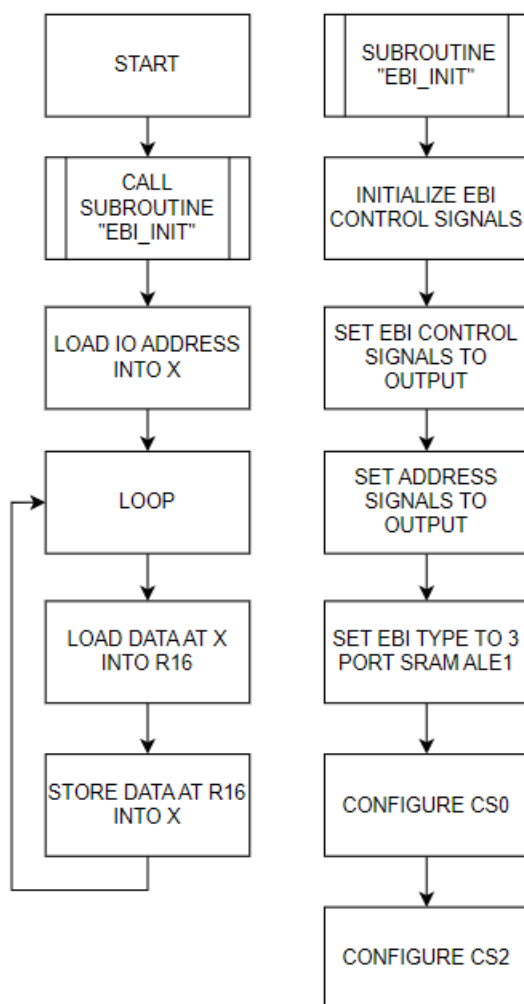
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PSEUDOCODE/FLOWCHARTS

SECTION 2

Figure 5: Flowchart for "lab4_2.asm"

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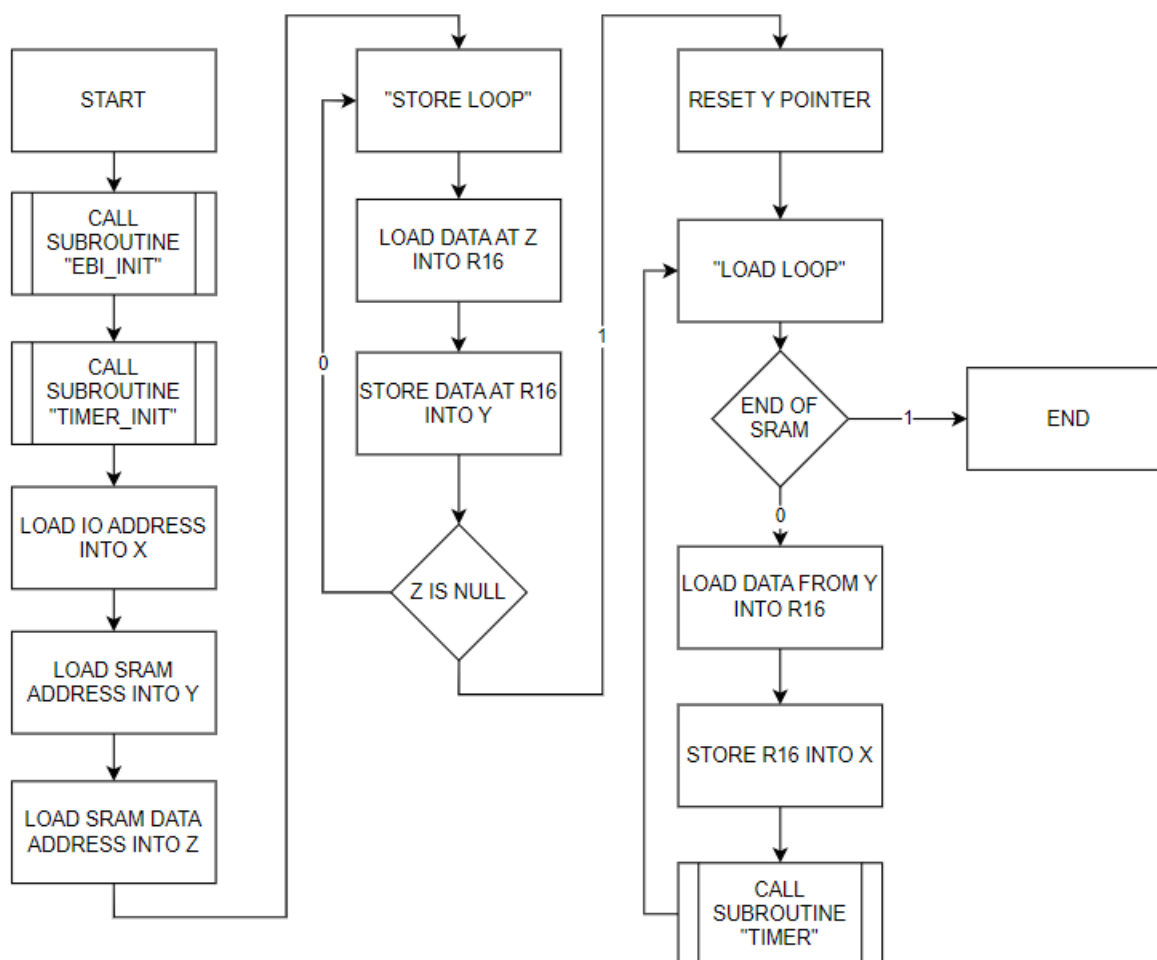
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Figure 6: Main routine for "lab4_3a.asm"

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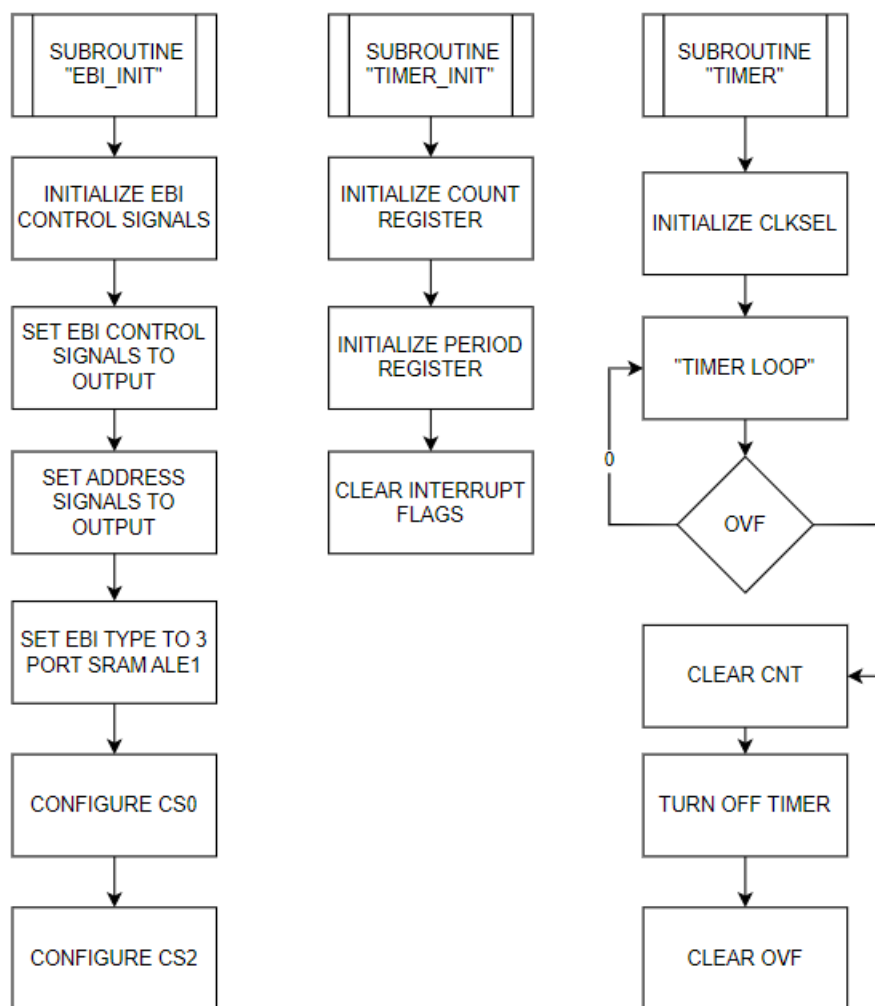
Figure 7: Subroutines for "lab4_3a.asm"

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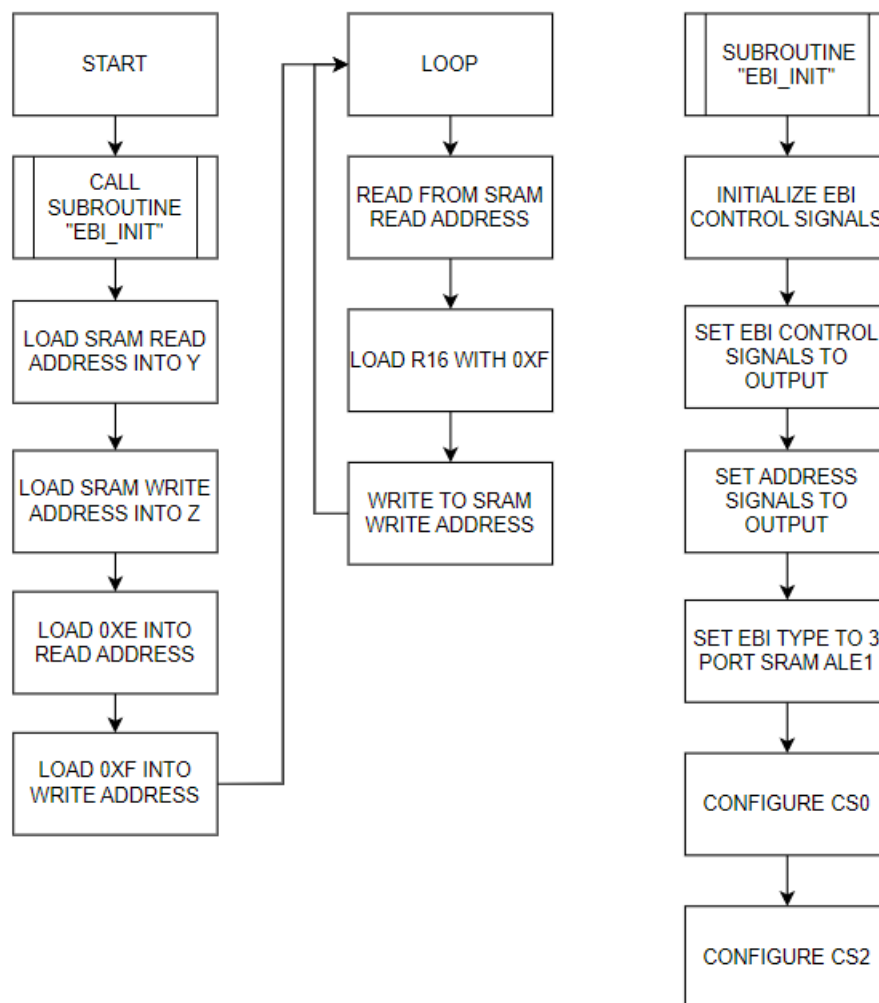
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Figure 8: Main loop and subroutines for "lab4_3b.asm"

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PROGRAM CODE

SECTION 2

```
;*******************************************
;Lab 4, Section 2
;Name: Steven Miller
;Class #: 11318
;PI Name: Anthony Stross
;Description: Writes switch values from the external switches to the external LED's
;*******************************************
;
;***************INCLUDES*******************************
.include "ATxmega128a1udef.inc"
;**************END OF INCLUDES*************************
;

;*******************************EQUATES*****************************
.EQU STACKEND = 0x3fff ;top of stack
.EQU STACKBEGIN = 0x2000 ;bottom of stack
.EQU INPUT = 0B00000000
.EQU OUTPUT = 0B11111111
.EQU IO_START_ADDRESS = 0X224000
.EQU SRAM_START_ADDRESS = 0X128000
;*****************************END OF EQUATES****************************

;*****************************DEFS*****************************
;****************************END OF DEFS****************************
;

;***********MEMORY CONFIGURATION************************

;***********END OF MEMORY CONFIGURATION**************
;***********MAIN PROGRAM*****************************
.CSEG
.ORG 0X0000
        RJMP MAIN
.ORG 0X0200
MAIN:
        ;INITIALIZE STACK POINTER
        LDI R16, LOW(STACKBEGIN)
        out CPU_SPL, R16
        LDI R16, HIGH(STACKEND)
        OUT CPU_SPH, R16
        RCALL EBI_INIT
        ;LOAD IO ADDRESS
        LDI XL, BYTE1(IO_START_ADDRESS)
        LDI XH, BYTE2(IO_START_ADDRESS)
        LDI R16, BYTE3(IO_START_ADDRESS)
        OUT CPU_RAMPX, R16
        LOOP:
        ld r16, x
        st x,r16
        RJMP LOOP
END:
RJMP END
;****************SUBROUTINES************************

;*******************************************
;
;NAME:EBI_INIT
;PURPOSE: INITIALIZES EBI SYSTEM
;REGISTERS AFFECTED: EBI_CNTRL
;INPUTS AFFECTED:PORTJ
;OUTPUTS AFFECTED:PORTK,RE, CS0, CS2
;*******************************************
EBI_INIT:
```

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```asm
        ;SAVE RELATIVE REGISTERS
        PUSH R16
        ;INIITIALIZE EBI CONTROL SIGNALS
        LDI R16,0B01010011
        STS PORTH_OUTSET, R16
        LDI R16,0B00000100
        STS PORTH_OUTCLR, R16
        ;SET EBI CONTROL SIGNALS TO OUTPUT
        LDI R16, 0B01010111
        STS PORTH_DIRSET, R16
        ;SET ADDRESS SIGNALS TO OUTPUT
        LDI R16,0XFF
        STS PORTK_DIRSET, R16
        ;SET EBI TYPE TO 3 PORT SRAM ALE1
        LDI R16, 0B00000001
        STS EBI_CTRL, R16
        ;CONFIGURE CS0
        LDI R16, 0B00011101
        STS EBI_CS0_CTRLA, R16
        LDI R16, BYTE2(SRAM_START_ADDRESS )
        STS EBI_CS0_BASEADDR, R16
        LDI R16, BYTE3(SRAM_START_ADDRESS )
        STS EBI_CS0_BASEADDR+1, R16
        ;CONFIGURE CS2
        LDI R16, 0B00000001
        STS EBI_CS2_CTRLA, R16
        LDI R16, BYTE2(IO_START_ADDRESS)
        STS EBI_CS2_BASEADDR,R16
        LDI R16, BYTE3(IO_START_ADDRESS)
        STS EBI_CS2_BASEADDR+1,R16
        ;RESTORE REGISTERS
        POP R16
RET
```

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SECTION 3A

```asm
;*******************************************
;Lab 4, Section 3a
;Name: Steven Miller
;Class #: 11318
;PI Name: Anthony Stross
;Description: Loads data from "sram_data.asm" from program memory into sram, then loads that data onto the
output leds
;*******************************************
;
;***************INCLUDES********************************
.include "ATxmega128a1udef.inc"
.include "SRAM_DATA.ASM"
;***************END OF INCLUDES*************************

;*****************************EQUATES*****************************
.EQU STACKEND = 0x3fff ;top of stack
.EQU STACKBEGIN = 0x2000 ;bottom of stack
.EQU INPUT = 0B00000000
.EQU OUTPUT = 0B11111111
.EQU IO_START_ADDRESS = 0X224000
.EQU SRAM_START_ADDRESS = 0X128000
.EQU SRAM_END_ADDRESS = 0X12FFFF
.EQU SYSCLK = 2000000
.EQU PRESCALAR = 64
.EQU DESIREDPERIOD = .30
.EQU RECIPROCAL = 1/.30
.EQU OFFSET = 0
;*****************************END OF EQUATES*****************************

;*****************************DEFS*****************************
;*****************************END OF DEFS*****************************

;***********MEMORY CONFIGURATION***********************

;***********END OF MEMORY CONFIGURATION***************
;***********MAIN PROGRAM*****************************
.CSEG
.ORG 0X0000
      RJMP MAIN
.ORG 0X0200
MAIN:
      ;initialize stack pointer
      LDI R16, LOW(STACKBEGIN)
      out CPU_SPL, R16
      LDI R16, HIGH(STACKEND)
      OUT CPU_SPH, R16
      ;INITIALIZE EBI AND TIMER
      RCALL EBI_INIT
      RCALL TIMER_INIT
      ;LOAD IO ADDRESS INTO X
      LDI XL, BYTE1(IO_START_ADDRESS)
      LDI XH, BYTE2(IO_START_ADDRESS)
      LDI R16, BYTE3(IO_START_ADDRESS)
      OUT CPU_RAMPX, R16
      ;LOAD SRAM ADDRESS INTO Y
      LDI YL, BYTE1(SRAM_START_ADDRESS)
      LDI YH, BYTE2(SRAM_START_ADDRESS)
      LDI R16, BYTE3(SRAM_START_ADDRESS)
      OUT CPU_RAMPY, R16
      ;LOAD SRAM DATA ADDRESS INTO Z
      LDI ZL, BYTE1(SRAM_DATA<<1)
      LDI ZH, BYTE2(SRAM_DATA<<1)
      LDI R16, BYTE3(SRAM_DATA<<1)
```

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```asm
        OUT CPU_RAMPZ, R16

        STORE_LOOP:
                ;LOAD DATA AT Z INTO R16
                ELPM R16, Z+
                ;STORE DATA AT R16 INTO Y
                ST Y+, R16
                ;CHECK IF Z IS NULL
                ELPM R16, Z
                CPI R16, 0X00
        BRNE STORE_LOOP

        ;RESET Y POINTER
        LDI YL, BYTE1(SRAM_START_ADDRESS)
        LDI YH, BYTE2(SRAM_START_ADDRESS)
        LDI R16, BYTE3(SRAM_START_ADDRESS)
        OUT CPU_RAMPY, R16

        LOAD_LOOP:
                ;CHECK IF END OF SRAM
                LDS R16, CPU_RAMPY
                CPI R16, 0X13
                BREQ END
                ;LOAD DATA FROM Y INTO R16
                LD R16, Y+
                ;STORE R16 INTO X
                ST X, R16
                ;START TIMER
                RCALL TIMER

        RJMP LOAD_LOOP
end:
rjmp end
;*****************************************
;NAME:EBI_INIT
;PURPOSE: INITIALIZES EBI SYSTEM
;REGISTERS AFFECTED: EBI_CNTRL
;INPUTS AFFECTED:N/A
;OUTPUTS AFFECTED:PORTK,RE, CS0, CS2
;*****************************************
;
EBI_INIT:
        ;SAVE RELATIVE REGISTERS
        PUSH R16
        ;INIITIALIZE EBI CONTROL SIGNALS
        LDI R16,0B01010011
        STS PORTH_OUTSET, R16
        LDI R16,0B00000100
        STS PORTH_OUTCLR, R16
        ;SET EBI CONTROL SIGNALS TO OUTPUT
        LDI R16, 0B01010111
        STS PORTH_DIRSET, R16
        ;SET ADDRESS SIGNALS TO OUTPUT
        LDI R16,0XFF
        STS PORTK_DIRSET, R16
        ;SET EBI TYPE TO 3 PORT SRAM ALE1
        LDI R16, 0B00000001
        STS EBI_CTRL, R16
        ;CONFIGURE CS0
        LDI R16, 0B00011101
        STS EBI_CS0_CTRLA, R16
        LDI R16, BYTE2(SRAM_START_ADDRESS )
        STS EBI_CS0_BASEADDR, R16
        LDI R16, BYTE3(SRAM_START_ADDRESS )
        STS EBI_CS0_BASEADDR+1, R16
```

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```asm
        ;CONFIGURE CS2
        LDI R16, 0B00000001
        STS EBI_CS2_CTRLA, R16
        LDI R16, BYTE2(IO_START_ADDRESS)
        STS EBI_CS2_BASEADDR,R16
        LDI R16, BYTE3(IO_START_ADDRESS)
        STS EBI_CS2_BASEADDR+1,R16
        ;RESTORE REGISTERS
        POP R16
RET
;*****************************************
;NAME:TIMER_INIT
;PURPOSE: INITIALIZES TIMER ON PORT C
;REGISTERS AFFECTED: TCC0_CNT, TCC0_PER, TCC0_INTFLAGS
;INPUTS AFFECTED:N/A
;OUTPUTS AFFECTED:N/A
;*****************************************
;
TIMER_INIT:
        PUSH R16
        ;INITIALIZE COUNT REGISTER
        LDI R16, 0B00000000
        STS TCC0_CNT, R16
        STS TCC0_CNT+1, R16
        ;INITIALIZE PERIOD REGISTER
        LDI r16,low(((sysclk/prescalar)/reciprocal)+offset)
        STS TCC0_PER, r16
        LDI r16,high(((sysclk/prescalar)/reciprocal)+offset)
        STS TCC0_PER+1,r16
        ;CLEAR INTERRUPT FLAGS
        LDI R16, 0B00000001
        STS TCC0_INTFLAGS, R16
        POP R16
RET
;*****************************************
;NAME:TIMER
;PURPOSE: THE ACTUAL TIMER
;REGISTERS AFFECTED: TCC0_CNT, TCC0_CTRLA
;INPUTS AFFECTED:N/A
;OUTPUTS AFFECTED:N/A
;*****************************************
;
TIMER:
        PUSH R16
        ;INITIALIZE CLKSEL
        LDI R16, TC_CLKSEL_DIV64_gc
        STS TCC0_CTRLA, R16
        TIMER_LOOP:
        ;check ov flag
        lds r17,TCC0_INTFLAGS
        ;branch if we have overflow
        sbrs  r17,TC0_OVFIF_bp
        rjmp TIMER_LOOP
        ;CLEAR COUNT
        LDI R16, 0B00000000
        STS TCC0_CNT, R16
        STS TCC0_CNT+1,R16
        ;TURN OFF TIMER
        LDI R16, 0B00000000
        STS TCC0_CTRLA, R16
        ;CLEAR OVF
        LDI R16, TC0_BYTEM0_bm
        STS TCC0_INTFLAGS, R16
        POP R16
RET
```

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SECTION 3B

```asm
;*****************************************

;Lab 4, Section 3b
;Name: Steven Miller
;Class #: 11318
;PI Name: Anthony Stross
;Description: Writes switch values from the external switches to the external LED's
;*****************************************
;
;***************INCLUDES*****************************
.include "ATxmega128a1udef.inc"
;**************END OF INCLUDES*****************************

;********************************EQUATES***************************
.EQU STACKEND = 0x3fff ;top of stack
.EQU STACKBEGIN = 0x2000 ;bottom of stack
.EQU INPUT = 0B00000000
.EQU OUTPUT = 0B11111111
.EQU IO_START_ADDRESS = 0X224000
.EQU SRAM_START_ADDRESS = 0X128000
.EQU READ_LOCATION = 0X128000
.EQU WRITE_LOCATION = 0X128100
;****************************END OF EQUATES***************************

;*****************************DEFS***************************
;****************************END OF DEFS***************************

;***********MEMORY CONFIGURATION***********************

;***********END OF MEMORY CONFIGURATION**************
;***********MAIN PROGRAM************************
.CSEG
.ORG 0X0000
        RJMP MAIN
.ORG 0X0200
MAIN:
        ;INITIALIZE STACK POINTER
        LDI R16, LOW(STACKBEGIN)
        out CPU_SPL, R16
        LDI R16, HIGH(STACKEND)
        OUT CPU_SPH, R16
        RCALL EBI_INIT
        ;LOAD SRAM ADDRESS INTO Y
        LDI YL, BYTE1(SRAM_START_ADDRESS)
        LDI YH, BYTE2(SRAM_START_ADDRESS)
        LDI R16, BYTE3(SRAM_START_ADDRESS)
        OUT CPU_RAMPY, R16
        ;LOAD WRITE ADDRESS INTO Z
        LDI ZL, BYTE1(WRITE_LOCATION )
        LDI ZH, BYTE2(WRITE_LOCATION )
        LDI R16, BYTE3(WRITE_LOCATION )
        OUT CPU_RAMPZ, R16
        ;INITIALIZE SRAM ADDRESSES
        LDI R16, 0XE
        ST Y,R16
        LDI R16, 0XF
        ST Z,R16
        LOOP:
        ;READ FROM SRAM READ ADDRESS
        LD R16,Y
        ;LOAD R16 WITH 0XF
        LDI R16, 0XF
        ;WRITE TO SRAM WRITE ADDRESS
        ST Z, r16
```

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```asm
        RJMP LOOP
END:
RJMP END
;****************SUBROUTINES***********************

;*****************************************
;NAME:EBI_INIT
;PURPOSE: INITIALIZES EBI SYSTEM
;REGISTERS AFFECTED: EBI_CNTRL
;INPUTS AFFECTED:PORTJ
;OUTPUTS AFFECTED:PORTK,RE, CS0, CS2
;*****************************************
;
EBI_INIT:
        ;SAVE RELATIVE REGISTERS
        PUSH R16
        ;INIITIALIZE EBI CONTROL SIGNALS
        LDI R16,0B01010011
        STS PORTH_OUTSET, R16
        LDI R16,0B00000100
        STS PORTH_OUTCLR, R16
        ;SET EBI CONTROL SIGNALS TO OUTPUT
        LDI R16, 0B01010111
        STS PORTH_DIRSET, R16
        ;SET ADDRESS SIGNALS TO OUTPUT
        LDI R16,0XFF
        STS PORTK_DIRSET, R16
        ;SET EBI TYPE TO 3 PORT SRAM ALE1
        LDI R16, 0B00000001
        STS EBI_CTRL, R16
        ;CONFIGURE CS0
        LDI R16, 0B00011101
        STS EBI_CS0_CTRLA, R16
        LDI R16, BYTE2(SRAM_START_ADDRESS )
        STS EBI_CS0_BASEADDR, R16
        LDI R16, BYTE3(SRAM_START_ADDRESS )
        STS EBI_CS0_BASEADDR+1, R16
        ;CONFIGURE CS2
        LDI R16, 0B00000001
        STS EBI_CS2_CTRLA, R16
        LDI R16, BYTE2(IO_START_ADDRESS)
        STS EBI_CS2_BASEADDR,R16
        LDI R16, BYTE3(IO_START_ADDRESS)
        STS EBI_CS2_BASEADDR+1,R16
        ;RESTORE REGISTERS
        POP R16
RET
```

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APPENDIX

Figure 9: SRAM EBI Extension Schematic.
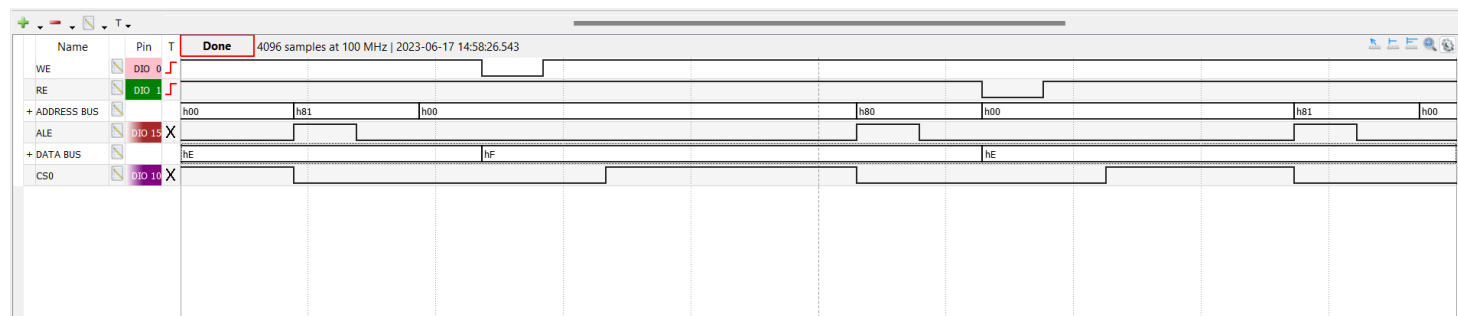
FIGURE 10: EBI logic measurement

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Figure 11: EBI logic measurement showing EBI read and write cycles

FIGURE 12: Logic schematic for external address decoding

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SECTION 3B

```
.CSEG
.ORG 0X0400
SRAM_DATA:
.db 0x49,0x6e,0x61,0x75,0x67,0x75,0x72,0x61
.db 0x6c,0x20,0x41,0x64,0x64,0x72,0x65,0x73
.db 0x73,0x20,0x6f,0x66,0x20,0x4a,0x6f,0x68
.db 0x6e,0x20,0x46,0x2e,0x20,0x4b,0x65,0x6e
.db 0x6e,0x65,0x64,0x79,0x0a,0x0a,0x46,0x52
.db 0x49,0x44,0x41,0x59,0x2c,0x20,0x4a,0x41
.db 0x4e,0x55,0x41,0x52,0x59,0x20,0x32,0x30
.db 0x2c,0x20,0x31,0x39,0x36,0x31,0x0a,0x56
.db 0x69,0x63,0x65,0x20,0x50,0x72,0x65,0x73
.db 0x69,0x64,0x65,0x6e,0x74,0x20,0x4a,0x6f
.db 0x68,0x6e,0x73,0x6f,0x6e,0x2c,0x20,0x4d
.db 0x72,0x2e,0x20,0x53,0x70,0x65,0x61,0x6b
.db 0x65,0x72,0x2c,0x20,0x4d,0x72,0x2e,0x20
.db 0x43,0x68,0x69,0x65,0x66,0x20,0x4a,0x75
.db 0x73,0x74,0x69,0x63,0x65,0x2c,0x20,0x50
.db 0x72,0x65,0x73,0x69,0x64,0x65,0x6e,0x74
.db 0x20,0x45,0x69,0x73,0x65,0x6e,0x68,0x6f
.db 0x77,0x65,0x72,0x2c,0x20,0x56,0x69,0x63
.db 0x65,0x20,0x50,0x72,0x65,0x73,0x69,0x64
.db 0x65,0x6e,0x74,0x20,0x4e,0x69,0x78,0x6f
.db 0x6e,0x2c,0x20,0x50,0x72,0x65,0x73,0x69
.db 0x64,0x65,0x6e,0x74,0x20,0x54,0x72,0x75
.db 0x6d,0x61,0x6e,0x2c,0x20,0x72,0x65,0x76
.db 0x65,0x72,0x65,0x6e,0x64,0x20,0x63,0x6c
.db 0x65,0x72,0x67,0x79,0x2c,0x20,0x66,0x65
.db 0x6c,0x6c,0x6f,0x77,0x20,0x63,0x69,0x74
.db 0x69,0x7a,0x65,0x6e,0x73,0x2c,0x20,0x77
.db 0x65,0x20,0x6f,0x62,0x73,0x65,0x72,0x76
.db 0x65,0x20,0x74,0x6f,0x64,0x61,0x79,0x20
.db 0x6e,0x6f,0x74,0x20,0x61,0x20,0x76,0x69
.db 0x63,0x74,0x6f,0x72,0x79,0x20,0x6f,0x66
.db 0x20,0x70,0x61,0x72,0x74,0x79,0x2c,0x20
.db 0x62,0x75,0x74,0x20,0x61,0x20,0x63,0x65
.db 0x6c,0x65,0x62,0x72,0x61,0x74,0x69,0x6f
.db 0x6e,0x20,0x6f,0x66,0x20,0x66,0x72,0x65
.db 0x65,0x64,0x6f,0x6d,0x2d,0x2d,0x73,0x79
.db 0x6d,0x62,0x6f,0x6c,0x69,0x7a,0x69,0x6e
.db 0x67,0x20,0x61,0x6e,0x20,0x65,0x6e,0x64
.db 0x2c,0x20,0x61,0x73,0x20,0x77,0x65,0x6c
.db 0x6c,0x20,0x61,0x73,0x20,0x61,0x20,0x62
.db 0x65,0x67,0x69,0x6e,0x6e,0x69,0x6e,0x67
.db 0x2d,0x2d,0x73,0x69,0x67,0x6e,0x69,0x66
.db 0x79,0x69,0x6e,0x67,0x20,0x72,0x65,0x6e
.db 0x65,0x77,0x61,0x6c,0x2c,0x20,0x61,0x73
.db 0x20,0x77,0x65,0x6c,0x6c,0x20,0x61,0x73
.db 0x20,0x63,0x68,0x61,0x6e,0x67,0x65,0x2e
.db 0x20,0x46,0x6f,0x72,0x20,0x49,0x20,0x68
.db 0x61,0x76,0x65,0x20,0x73,0x77,0x6f,0x72
.db 0x6e,0x20,0x62,0x65,0x66,0x6f,0x72,0x65
.db 0x20,0x79,0x6f,0x75,0x20,0x61,0x6e,0x64
.db 0x20,0x41,0x6c,0x6d,0x69,0x67,0x68,0x74
.db 0x79,0x20,0x47,0x6f,0x64,0x20,0x74,0x68
.db 0x65,0x20,0x73,0x61,0x6d,0x65,0x20,0x73
.db 0x6f,0x6c,0x65,0x6d,0x6e,0x20,0x6f,0x61
.db 0x74,0x68,0x20,0x6f,0x75,0x72,0x20,0x66
```

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```
.db 0x6f,0x72,0x65,0x62,0x65,0x61,0x72,0x73
.db 0x20,0x70,0x72,0x65,0x73,0x63,0x72,0x69
.db 0x62,0x65,0x64,0x20,0x6e,0x65,0x61,0x72
.db 0x6c,0x79,0x20,0x61,0x20,0x63,0x65,0x6e
.db 0x74,0x75,0x72,0x79,0x20,0x61,0x6e,0x64
.db 0x20,0x74,0x68,0x72,0x65,0x65,0x20,0x71
.db 0x75,0x61,0x72,0x74,0x65,0x72,0x73,0x20
.db 0x61,0x67,0x6f,0x2e,0x0a,0x0a,0x54,0x68
.db 0x65,0x20,0x77,0x6f,0x72,0x6c,0x64,0x20
.db 0x69,0x73,0x20,0x76,0x65,0x72,0x79,0x20
.db 0x64,0x69,0x66,0x66,0x65,0x72,0x65,0x6e
.db 0x74,0x20,0x6e,0x6f,0x77,0x2e,0x20,0x46
.db 0x6f,0x72,0x20,0x6d,0x61,0x6e,0x20,0x68
.db 0x6f,0x6c,0x64,0x73,0x20,0x69,0x6e,0x20
.db 0x68,0x69,0x73,0x20,0x6d,0x6f,0x72,0x74
.db 0x61,0x6c,0x20,0x68,0x61,0x6e,0x64,0x73
.db 0x20,0x74,0x68,0x65,0x20,0x70,0x6f,0x77
.db 0x65,0x72,0x20,0x74,0x6f,0x20,0x61,0x62
.db 0x6f,0x6c,0x69,0x73,0x68,0x20,0x61,0x6c
.db 0x6c,0x20,0x66,0x6f,0x72,0x6d,0x73,0x20
.db 0x6f,0x66,0x20,0x68,0x75,0x6d,0x61,0x6e
.db 0x20,0x70,0x6f,0x76,0x65,0x72,0x74,0x79
.db 0x20,0x61,0x6e,0x64,0x20,0x61,0x6c,0x6c
.db 0x20,0x66,0x6f,0x72,0x6d,0x73,0x20,0x6f
.db 0x66,0x20,0x68,0x75,0x6d,0x61,0x6e,0x20
.db 0x6c,0x69,0x66,0x65,0x2e,0x20,0x41,0x6e
.db 0x64,0x20,0x79,0x65,0x74,0x20,0x74,0x68
.db 0x65,0x20,0x73,0x61,0x6d,0x65,0x20,0x72
.db 0x65,0x76,0x6f,0x6c,0x75,0x74,0x69,0x6f
.db 0x6e,0x61,0x72,0x79,0x20,0x62,0x65,0x6c
.db 0x69,0x65,0x66,0x73,0x20,0x66,0x6f,0x72
.db 0x20,0x77,0x68,0x69,0x63,0x68,0x20,0x6f
.db 0x75,0x72,0x20,0x66,0x6f,0x72,0x65,0x62
.db 0x65,0x61,0x72,0x73,0x20,0x66,0x6f,0x75
.db 0x67,0x68,0x74,0x20,0x61,0x72,0x65,0x20
.db 0x73,0x74,0x69,0x6c,0x6c,0x20,0x61,0x74
.db 0x20,0x69,0x73,0x73,0x75,0x65,0x20,0x61
.db 0x72,0x6f,0x75,0x6e,0x64,0x20,0x74,0x68
.db 0x65,0x20,0x67,0x6c,0x6f,0x62,0x65,0x2d
.db 0x2d,0x74,0x68,0x65,0x20,0x62,0x65,0x6c
.db 0x69,0x65,0x66,0x20,0x74,0x68,0x61,0x74
.db 0x20,0x74,0x68,0x65,0x20,0x72,0x69,0x67
.db 0x68,0x74,0x73,0x20,0x6f,0x66,0x20,0x6d
.db 0x61,0x6e,0x20,0x63,0x6f,0x6d,0x65,0x20
.db 0x6e,0x6f,0x74,0x20,0x66,0x72,0x6f,0x6d
.db 0x20,0x74,0x68,0x65,0x20,0x67,0x65,0x6e
.db 0x65,0x72,0x6f,0x73,0x69,0x74,0x79,0x20
.db 0x6f,0x66,0x20,0x74,0x68,0x65,0x20,0x73
.db 0x74,0x61,0x74,0x65,0x2c,0x20,0x62,0x75
.db 0x74,0x20,0x66,0x72,0x6f,0x6d,0x20,0x74
.db 0x68,0x65,0x20,0x68,0x61,0x6e,0x64,0x20
.db 0x6f,0x66,0x20,0x47,0x6f,0x64,0x2e,0x0a
.db 0x0a,0x57,0x65,0x20,0x64,0x61,0x72,0x65
.db 0x20,0x6e,0x6f,0x74,0x20,0x66,0x6f,0x72
.db 0x67,0x65,0x74,0x20,0x74,0x6f,0x64,0x61
.db 0x79,0x20,0x74,0x68,0x61,0x74,0x20,0x77
.db 0x65,0x20,0x61,0x72,0x65,0x20,0x74,0x68
.db 0x65,0x20,0x68,0x65,0x69,0x72,0x73,0x20
.db 0x6f,0x66,0x20,0x74,0x68,0x61,0x74,0x20
.db 0x66,0x69,0x72,0x73,0x74,0x20,0x72,0x65
.db 0x76,0x6f,0x6c,0x75,0x74,0x69,0x6f,0x6e
```

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```
.db 0x2e,0x20,0x4c,0x65,0x74,0x20,0x74,0x68
.db 0x65,0x20,0x77,0x6f,0x72,0x64,0x20,0x67
.db 0x6f,0x20,0x66,0x6f,0x72,0x74,0x68,0x20
.db 0x66,0x72,0x6f,0x6d,0x20,0x74,0x68,0x69
.db 0x73,0x20,0x74,0x69,0x6d,0x65,0x20,0x61
.db 0x6e,0x64,0x20,0x70,0x6c,0x61,0x63,0x65
.db 0x2c,0x20,0x74,0x6f,0x20,0x66,0x72,0x69
.db 0x65,0x6e,0x64,0x20,0x61,0x6e,0x64,0x20
.db 0x66,0x6f,0x65,0x20,0x61,0x6c,0x69,0x6b
.db 0x65,0x2c,0x20,0x74,0x68,0x61,0x74,0x20
.db 0x74,0x68,0x65,0x20,0x74,0x6f,0x72,0x63
.db 0x68,0x20,0x68,0x61,0x73,0x20,0x62,0x65
.db 0x65,0x6e,0x20,0x70,0x61,0x73,0x73,0x65
.db 0x64,0x20,0x74,0x6f,0x20,0x61,0x20,0x6e
.db 0x65,0x77,0x20,0x67,0x65,0x6e,0x65,0x72
.db 0x61,0x74,0x69,0x6f,0x6e,0x20,0x6f,0x66
.db 0x20,0x41,0x6d,0x65,0x72,0x69,0x63,0x61
.db 0x6e,0x73,0x2d,0x2d,0x62,0x6f,0x72,0x6e
.db 0x20,0x69,0x6e,0x20,0x74,0x68,0x69,0x73
.db 0x20,0x63,0x65,0x6e,0x74,0x75,0x72,0x79
.db 0x2c,0x20,0x74,0x65,0x6d,0x70,0x65,0x72
.db 0x65,0x64,0x20,0x62,0x79,0x20,0x77,0x61
.db 0x72,0x2c,0x20,0x64,0x69,0x73,0x63,0x69
.db 0x70,0x6c,0x69,0x6e,0x65,0x64,0x20,0x62
.db 0x79,0x20,0x61,0x20,0x68,0x61,0x72,0x64
.db 0x20,0x61,0x6e,0x64,0x20,0x62,0x69,0x74
.db 0x74,0x65,0x72,0x20,0x70,0x65,0x61,0x63
.db 0x65,0x2c,0x20,0x70,0x72,0x6f,0x75,0x64
.db 0x20,0x6f,0x66,0x20,0x6f,0x75,0x72,0x20
.db 0x61,0x6e,0x63,0x69,0x65,0x6e,0x74,0x20
.db 0x68,0x65,0x72,0x69,0x74,0x61,0x67,0x65
.db 0x2d,0x2d,0x61,0x6e,0x64,0x20,0x75,0x6e
.db 0x77,0x69,0x6c,0x6c,0x69,0x6e,0x67,0x20
.db 0x74,0x6f,0x20,0x77,0x69,0x74,0x6e,0x65
.db 0x73,0x73,0x20,0x6f,0x72,0x20,0x70,0x65
.db 0x72,0x6d,0x69,0x74,0x20,0x74,0x68,0x65
.db 0x20,0x73,0x6c,0x6f,0x77,0x20,0x75,0x6e
.db 0x64,0x6f,0x69,0x6e,0x67,0x20,0x6f,0x66
.db 0x20,0x74,0x68,0x6f,0x73,0x65,0x20,0x68
.db 0x75,0x6d,0x61,0x6e,0x20,0x72,0x69,0x67
.db 0x68,0x74,0x73,0x20,0x74,0x6f,0x20,0x77
.db 0x68,0x69,0x63,0x68,0x20,0x74,0x68,0x69
.db 0x73,0x20,0x4e,0x61,0x74,0x69,0x6f,0x6e
.db 0x20,0x68,0x61,0x73,0x20,0x61,0x6c,0x77
.db 0x61,0x79,0x73,0x20,0x62,0x65,0x65,0x6e
.db 0x20,0x63,0x6f,0x6d,0x6d,0x69,0x74,0x74
.db 0x65,0x64,0x2c,0x20,0x61,0x6e,0x64,0x20
.db 0x74,0x6f,0x20,0x77,0x68,0x69,0x63,0x68
.db 0x20,0x77,0x65,0x20,0x61,0x72,0x65,0x20
.db 0x63,0x6f,0x6d,0x6d,0x69,0x74,0x74,0x65
.db 0x64,0x20,0x74,0x6f,0x64,0x61,0x79,0x20
.db 0x61,0x74,0x20,0x68,0x6f,0x6d,0x65,0x20
.db 0x61,0x6e,0x64,0x20,0x61,0x72,0x6f,0x75
.db 0x6e,0x64,0x20,0x74,0x68,0x65,0x20,0x77
.db 0x6f,0x72,0x6c,0x64,0x2e,0x0a,0x0a,0x4c
.db 0x65,0x74,0x20,0x65,0x76,0x65,0x72,0x79
.db 0x20,0x6e,0x61,0x74,0x69,0x6f,0x6e,0x20
.db 0x6b,0x6e,0x6f,0x77,0x2c,0x20,0x77,0x68
.db 0x65,0x74,0x68,0x65,0x72,0x20,0x69,0x74
.db 0x20,0x77,0x69,0x73,0x68,0x65,0x73,0x20
.db 0x75,0x73,0x20,0x77,0x65,0x6c,0x6c,0x20
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```
.db 0x6f,0x72,0x20,0x69,0x6c,0x6c,0x2c,0x20
.db 0x74,0x68,0x61,0x74,0x20,0x77,0x65,0x20
.db 0x73,0x68,0x61,0x6c,0x6c,0x20,0x70,0x61
.db 0x79,0x20,0x61,0x6e,0x79,0x20,0x70,0x72
.db 0x69,0x63,0x65,0x2c,0x20,0x62,0x65,0x61
.db 0x72,0x20,0x61,0x6e,0x79,0x20,0x62,0x75
.db 0x72,0x64,0x65,0x6e,0x2c,0x20,0x6d,0x65
.db 0x65,0x74,0x20,0x61,0x6e,0x79,0x20,0x68
.db 0x61,0x72,0x64,0x73,0x68,0x69,0x70,0x2c
.db 0x20,0x73,0x75,0x70,0x70,0x6f,0x72,0x74
.db 0x20,0x61,0x6e,0x79,0x20,0x66,0x72,0x69
.db 0x65,0x6e,0x64,0x2c,0x20,0x6f,0x70,0x70
.db 0x6f,0x73,0x65,0x20,0x61,0x6e,0x79,0x20
.db 0x66,0x6f,0x65,0x2c,0x20,0x69,0x6e,0x20
.db 0x6f,0x72,0x64,0x65,0x72,0x20,0x74,0x6f
.db 0x20,0x61,0x73,0x73,0x75,0x72,0x65,0x20
.db 0x74,0x68,0x65,0x20,0x73,0x75,0x72,0x76
.db 0x69,0x76,0x61,0x6c,0x20,0x61,0x6e,0x64
.db 0x20,0x74,0x68,0x65,0x20,0x73,0x75,0x63
.db 0x63,0x65,0x73,0x73,0x20,0x6f,0x66,0x20
.db 0x6c,0x69,0x62,0x65,0x72,0x74,0x79,0x2e
.db 0x0a,0x0a,0x54,0x68,0x69,0x73,0x20,0x6d
.db 0x75,0x63,0x68,0x20,0x77,0x65,0x20,0x70
.db 0x6c,0x65,0x64,0x67,0x65,0x2d,0x2d,0x61
.db 0x6e,0x64,0x20,0x6d,0x6f,0x72,0x65,0x2e
.db 0x0a,0x0a,0x54,0x6f,0x20,0x74,0x68,0x6f
.db 0x73,0x65,0x20,0x6f,0x6c,0x64,0x20,0x61
.db 0x6c,0x6c,0x69,0x65,0x73,0x20,0x77,0x68
.db 0x6f,0x73,0x65,0x20,0x63,0x75,0x6c,0x74
.db 0x75,0x72,0x61,0x6c,0x20,0x61,0x6e,0x64
.db 0x20,0x73,0x70,0x69,0x72,0x69,0x74,0x75
.db 0x61,0x6c,0x20,0x6f,0x72,0x69,0x67,0x69
.db 0x6e,0x73,0x20,0x77,0x65,0x20,0x73,0x68
.db 0x61,0x72,0x65,0x2c,0x20,0x77,0x65,0x20
.db 0x70,0x6c,0x65,0x64,0x67,0x65,0x20,0x74
.db 0x68,0x65,0x20,0x6c,0x6f,0x79,0x61,0x6c
.db 0x74,0x79,0x20,0x6f,0x66,0x20,0x66,0x61
.db 0x69,0x74,0x68,0x66,0x75,0x6c,0x20,0x66
.db 0x72,0x69,0x65,0x6e,0x64,0x73,0x2e,0x20
.db 0x55,0x6e,0x69,0x74,0x65,0x64,0x2c,0x20
.db 0x74,0x68,0x65,0x72,0x65,0x20,0x69,0x73
.db 0x20,0x6c,0x69,0x74,0x74,0x6c,0x65,0x20
.db 0x77,0x65,0x20,0x63,0x61,0x6e,0x6e,0x6f
.db 0x74,0x20,0x64,0x6f,0x20,0x69,0x6e,0x20
.db 0x61,0x20,0x68,0x6f,0x73,0x74,0x20,0x6f
.db 0x66,0x20,0x63,0x6f,0x6f,0x70,0x65,0x72
.db 0x61,0x74,0x69,0x76,0x65,0x20,0x76,0x65
.db 0x6e,0x74,0x75,0x72,0x65,0x73,0x2e,0x20
.db 0x44,0x69,0x76,0x69,0x64,0x65,0x64,0x2c
.db 0x20,0x74,0x68,0x65,0x72,0x65,0x20,0x69
.db 0x73,0x20,0x6c,0x69,0x74,0x74,0x6c,0x65
.db 0x20,0x77,0x65,0x20,0x63,0x61,0x6e,0x20
.db 0x64,0x6f,0x2d,0x2d,0x66,0x6f,0x72,0x20
.db 0x77,0x65,0x20,0x64,0x61,0x72,0x65,0x20
.db 0x6e,0x6f,0x74,0x20,0x6d,0x65,0x65,0x74
.db 0x20,0x61,0x20,0x70,0x6f,0x77,0x65,0x72
.db 0x66,0x75,0x6c,0x20,0x63,0x68,0x61,0x6c
.db 0x6c,0x65,0x6e,0x67,0x65,0x20,0x61,0x74
.db 0x20,0x6f,0x64,0x64,0x73,0x20,0x61,0x6e
.db 0x64,0x20,0x73,0x70,0x6c,0x69,0x74,0x20
.db 0x61,0x73,0x75,0x6e,0x64,0x65,0x72,0x2e
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Miller, Steven
Class #: 11318
Anthony Stross
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.db 0x0a,0x0a,0x54,0x6f,0x20,0x74,0x68,0x6f
.db 0x73,0x65,0x20,0x6e,0x65,0x77,0x20,0x53
.db 0x74,0x61,0x74,0x65,0x73,0x20,0x77,0x68
.db 0x6f,0x6d,0x20,0x77,0x65,0x20,0x77,0x65
.db 0x6c,0x63,0x6f,0x6d,0x65,0x20,0x74,0x6f
.db 0x20,0x74,0x68,0x65,0x20,0x72,0x61,0x6e
.db 0x6b,0x73,0x20,0x6f,0x66,0x20,0x74,0x68
.db 0x65,0x20,0x66,0x72,0x65,0x65,0x2c,0x20
.db 0x77,0x65,0x20,0x70,0x6c,0x65,0x64,0x67
.db 0x65,0x20,0x6f,0x75,0x72,0x20,0x77,0x6f
.db 0x72,0x64,0x20,0x74,0x68,0x61,0x74,0x20
.db 0x6f,0x6e,0x65,0x20,0x66,0x6f,0x72,0x6d
.db 0x20,0x6f,0x66,0x20,0x63,0x6f,0x6c,0x6f
.db 0x6e,0x69,0x61,0x6c,0x20,0x63,0x6f,0x6e
.db 0x74,0x72,0x6f,0x6c,0x20,0x73,0x68,0x61
.db 0x6c,0x6c,0x20,0x6e,0x6f,0x74,0x20,0x68
.db 0x61,0x76,0x65,0x20,0x70,0x61,0x73,0x73
.db 0x65,0x64,0x20,0x61,0x77,0x61,0x79,0x20
.db 0x6d,0x65,0x72,0x65,0x6c,0x79,0x20,0x74
.db 0x6f,0x20,0x62,0x65,0x20,0x72,0x65,0x70
.db 0x6c,0x61,0x63,0x65,0x64,0x20,0x62,0x79
.db 0x20,0x61,0x20,0x66,0x61,0x72,0x20,0x6d
.db 0x6f,0x72,0x65,0x20,0x69,0x72,0x6f,0x6e
.db 0x20,0x74,0x79,0x72,0x61,0x6e,0x6e,0x79
.db 0x2e,0x20,0x57,0x65,0x20,0x73,0x68,0x61
.db 0x6c,0x6c,0x20,0x6e,0x6f,0x74,0x20,0x61
.db 0x6c,0x77,0x61,0x79,0x73,0x20,0x65,0x78
.db 0x70,0x65,0x63,0x74,0x20,0x74,0x6f,0x20
.db 0x66,0x69,0x6e,0x64,0x20,0x74,0x68,0x65
.db 0x6d,0x20,0x73,0x75,0x70,0x70,0x6f,0x72
.db 0x74,0x69,0x6e,0x67,0x20,0x6f,0x75,0x72
.db 0x20,0x76,0x69,0x65,0x77,0x2e,0x20,0x42
.db 0x75,0x74,0x20,0x77,0x65,0x20,0x73,0x68
.db 0x61,0x6c,0x6c,0x20,0x61,0x6c,0x77,0x61
.db 0x79,0x73,0x20,0x68,0x6f,0x70,0x65,0x20
.db 0x74,0x6f,0x20,0x66,0x69,0x6e,0x64,0x20
.db 0x74,0x68,0x65,0x6d,0x20,0x73,0x74,0x72
.db 0x6f,0x6e,0x67,0x6c,0x79,0x20,0x73,0x75
.db 0x70,0x70,0x6f,0x72,0x74,0x69,0x6e,0x67
.db 0x20,0x74,0x68,0x65,0x69,0x72,0x20,0x6f
.db 0x77,0x6e,0x20,0x66,0x72,0x65,0x65,0x64
.db 0x6f,0x6d,0x2d,0x2d,0x61,0x6e,0x64,0x20
.db 0x74,0x6f,0x20,0x72,0x65,0x6d,0x65,0x6d
.db 0x62,0x65,0x72,0x20,0x74,0x68,0x61,0x74
.db 0x2c,0x20,0x69,0x6e,0x20,0x74,0x68,0x65
.db 0x20,0x70,0x61,0x73,0x74,0x2c,0x20,0x74
.db 0x68,0x6f,0x73,0x65,0x20,0x77,0x68,0x6f
.db 0x20,0x66,0x6f,0x6f,0x6c,0x69,0x73,0x68
.db 0x6c,0x79,0x20,0x73,0x6f,0x75,0x67,0x68
.db 0x74,0x20,0x70,0x6f,0x77,0x65,0x72,0x20
.db 0x62,0x79,0x20,0x72,0x69,0x64,0x69,0x6e
.db 0x67,0x20,0x74,0x68,0x65,0x20,0x62,0x61
.db 0x63,0x6b,0x20,0x6f,0x66,0x20,0x74,0x68
.db 0x65,0x20,0x74,0x69,0x67,0x65,0x72,0x20
.db 0x65,0x6e,0x64,0x65,0x64,0x20,0x75,0x70
.db 0x20,0x69,0x6e,0x73,0x69,0x64,0x65,0x2e
.db 0x0a,0x0a,0x54,0x6f,0x20,0x74,0x68,0x6f
.db 0x73,0x65,0x20,0x70,0x65,0x6f,0x70,0x6c
.db 0x65,0x73,0x20,0x69,0x6e,0x20,0x74,0x68
.db 0x65,0x20,0x68,0x75,0x74,0x73,0x20,0x61
.db 0x6e,0x64,0x20,0x76,0x69,0x6c,0x6c,0x61
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Miller, Steven
Class #: 11318
Anthony Stross
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.db 0x67,0x65,0x73,0x20,0x61,0x63,0x72,0x6f
.db 0x73,0x73,0x20,0x74,0x68,0x65,0x20,0x67
.db 0x6c,0x6f,0x62,0x65,0x20,0x73,0x74,0x72
.db 0x75,0x67,0x67,0x6c,0x69,0x6e,0x67,0x20
.db 0x74,0x6f,0x20,0x62,0x72,0x65,0x61,0x6b
.db 0x20,0x74,0x68,0x65,0x20,0x62,0x6f,0x6e
.db 0x64,0x73,0x20,0x6f,0x66,0x20,0x6d,0x61
.db 0x73,0x73,0x20,0x6d,0x69,0x73,0x65,0x72
.db 0x79,0x2c,0x20,0x77,0x65,0x20,0x70,0x6c
.db 0x65,0x64,0x67,0x65,0x20,0x6f,0x75,0x72
.db 0x20,0x62,0x65,0x73,0x74,0x20,0x65,0x66
.db 0x66,0x6f,0x72,0x74,0x73,0x20,0x74,0x6f
.db 0x20,0x68,0x65,0x6c,0x70,0x20,0x74,0x68
.db 0x65,0x6d,0x20,0x68,0x65,0x6c,0x70,0x20
.db 0x74,0x68,0x65,0x6d,0x73,0x65,0x6c,0x76
.db 0x65,0x73,0x2c,0x20,0x66,0x6f,0x72,0x20
.db 0x77,0x68,0x61,0x74,0x65,0x76,0x65,0x72
.db 0x20,0x70,0x65,0x72,0x69,0x6f,0x64,0x20
.db 0x69,0x73,0x20,0x72,0x65,0x71,0x75,0x69
.db 0x72,0x65,0x64,0x2d,0x2d,0x6e,0x6f,0x74
.db 0x20,0x62,0x65,0x63,0x61,0x75,0x73,0x65
.db 0x20,0x74,0x68,0x65,0x20,0x43,0x6f,0x6d
.db 0x6d,0x75,0x6e,0x69,0x73,0x74,0x73,0x20
.db 0x6d,0x61,0x79,0x20,0x62,0x65,0x20,0x64
.db 0x6f,0x69,0x6e,0x67,0x20,0x69,0x74,0x2c
.db 0x20,0x6e,0x6f,0x74,0x20,0x62,0x65,0x63
.db 0x61,0x75,0x73,0x65,0x20,0x77,0x65,0x20
.db 0x73,0x65,0x65,0x6b,0x20,0x74,0x68,0x65
.db 0x69,0x72,0x20,0x76,0x6f,0x74,0x65,0x73
.db 0x2c,0x20,0x62,0x75,0x74,0x20,0x62,0x65
.db 0x63,0x61,0x75,0x73,0x65,0x20,0x69,0x74
.db 0x20,0x69,0x73,0x20,0x72,0x69,0x67,0x68
.db 0x74,0x2e,0x20,0x49,0x66,0x20,0x61,0x20
.db 0x66,0x72,0x65,0x65,0x20,0x73,0x6f,0x63
.db 0x69,0x65,0x74,0x79,0x20,0x63,0x61,0x6e
.db 0x6e,0x6f,0x74,0x20,0x68,0x65,0x6c,0x70
.db 0x20,0x74,0x68,0x65,0x20,0x6d,0x61,0x6e
.db 0x79,0x20,0x77,0x68,0x6f,0x20,0x61,0x72
.db 0x65,0x20,0x70,0x6f,0x6f,0x72,0x2c,0x20
.db 0x69,0x74,0x20,0x63,0x61,0x6e,0x6e,0x6f
.db 0x74,0x20,0x73,0x61,0x76,0x65,0x20,0x74
.db 0x68,0x65,0x20,0x66,0x65,0x77,0x20,0x77
.db 0x68,0x6f,0x20,0x61,0x72,0x65,0x20,0x72
.db 0x69,0x63,0x68,0x2e,0x0a,0x0a,0x54,0x6f
.db 0x20,0x6f,0x75,0x72,0x20,0x73,0x69,0x73
.db 0x74,0x65,0x72,0x20,0x72,0x65,0x70,0x75
.db 0x62,0x6c,0x69,0x63,0x73,0x20,0x73,0x6f
.db 0x75,0x74,0x68,0x20,0x6f,0x66,0x20,0x6f
.db 0x75,0x72,0x20,0x62,0x6f,0x72,0x64,0x65
.db 0x72,0x2c,0x20,0x77,0x65,0x20,0x6f,0x66
.db 0x66,0x65,0x72,0x20,0x61,0x20,0x73,0x70
.db 0x65,0x63,0x69,0x61,0x6c,0x20,0x70,0x6c
.db 0x65,0x64,0x67,0x65,0x2d,0x2d,0x74,0x6f
.db 0x20,0x63,0x6f,0x6e,0x76,0x65,0x72,0x74
.db 0x20,0x6f,0x75,0x72,0x20,0x67,0x6f,0x6f
.db 0x64,0x20,0x77,0x6f,0x72,0x64,0x73,0x20
.db 0x69,0x6e,0x74,0x6f,0x20,0x67,0x6f,0x6f
.db 0x64,0x20,0x64,0x65,0x65,0x64,0x73,0x2d
.db 0x2d,0x69,0x6e,0x20,0x61,0x20,0x6e,0x65
.db 0x77,0x20,0x61,0x6c,0x6c,0x69,0x61,0x6e
.db 0x63,0x65,0x20,0x66,0x6f,0x72,0x20,0x70
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Miller, Steven
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Anthony Stross
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.db 0x72,0x6f,0x67,0x72,0x65,0x73,0x73,0x2d
.db 0x2d,0x74,0x6f,0x20,0x61,0x73,0x73,0x69
.db 0x73,0x74,0x20,0x66,0x72,0x65,0x65,0x20
.db 0x6d,0x65,0x6e,0x20,0x61,0x6e,0x64,0x20
.db 0x66,0x72,0x65,0x65,0x20,0x67,0x6f,0x76
.db 0x65,0x72,0x6e,0x6d,0x65,0x6e,0x74,0x73
.db 0x20,0x69,0x6e,0x20,0x63,0x61,0x73,0x74
.db 0x69,0x6e,0x67,0x20,0x6f,0x66,0x66,0x20
.db 0x74,0x68,0x65,0x20,0x63,0x68,0x61,0x69
.db 0x6e,0x73,0x20,0x6f,0x66,0x20,0x70,0x6f
.db 0x76,0x65,0x72,0x74,0x79,0x2e,0x20,0x42
.db 0x75,0x74,0x20,0x74,0x68,0x69,0x73,0x20
.db 0x70,0x65,0x61,0x63,0x65,0x66,0x75,0x6c
.db 0x20,0x72,0x65,0x76,0x6f,0x6c,0x75,0x74
.db 0x69,0x6f,0x6e,0x20,0x6f,0x66,0x20,0x68
.db 0x6f,0x70,0x65,0x20,0x63,0x61,0x6e,0x6e
.db 0x6f,0x74,0x20,0x62,0x65,0x63,0x6f,0x6d
.db 0x65,0x20,0x74,0x68,0x65,0x20,0x70,0x72
.db 0x65,0x79,0x20,0x6f,0x66,0x20,0x68,0x6f
.db 0x73,0x74,0x69,0x6c,0x65,0x20,0x70,0x6f
.db 0x77,0x65,0x72,0x73,0x2e,0x20,0x4c,0x65
.db 0x74,0x20,0x61,0x6c,0x6c,0x20,0x6f,0x75
.db 0x72,0x20,0x6e,0x65,0x69,0x67,0x68,0x62
.db 0x6f,0x72,0x73,0x20,0x6b,0x6e,0x6f,0x77
.db 0x20,0x74,0x68,0x61,0x74,0x20,0x77,0x65
.db 0x20,0x73,0x68,0x61,0x6c,0x6c,0x20,0x6a
.db 0x6f,0x69,0x6e,0x20,0x77,0x69,0x74,0x68
.db 0x20,0x74,0x68,0x65,0x6d,0x20,0x74,0x6f
.db 0x20,0x6f,0x70,0x70,0x6f,0x73,0x65,0x20
.db 0x61,0x67,0x67,0x72,0x65,0x73,0x73,0x69
.db 0x6f,0x6e,0x20,0x6f,0x72,0x20,0x73,0x75
.db 0x62,0x76,0x65,0x72,0x73,0x69,0x6f,0x6e
.db 0x20,0x61,0x6e,0x79,0x77,0x68,0x65,0x72
.db 0x65,0x20,0x69,0x6e,0x20,0x74,0x68,0x65
.db 0x20,0x41,0x6d,0x65,0x72,0x69,0x63,0x61
.db 0x73,0x2e,0x20,0x41,0x6e,0x64,0x20,0x6c
.db 0x65,0x74,0x20,0x65,0x76,0x65,0x72,0x79
.db 0x20,0x6f,0x74,0x68,0x65,0x72,0x20,0x70
.db 0x6f,0x77,0x65,0x72,0x20,0x6b,0x6e,0x6f
.db 0x77,0x20,0x74,0x68,0x61,0x74,0x20,0x74
.db 0x68,0x69,0x73,0x20,0x48,0x65,0x6d,0x69
.db 0x73,0x70,0x68,0x65,0x72,0x65,0x20,0x69
.db 0x6e,0x74,0x65,0x6e,0x64,0x73,0x20,0x74
.db 0x6f,0x20,0x72,0x65,0x6d,0x61,0x69,0x6e
.db 0x20,0x74,0x68,0x65,0x20,0x6d,0x61,0x73
.db 0x74,0x65,0x72,0x20,0x6f,0x66,0x20,0x69
.db 0x74,0x73,0x20,0x6f,0x77,0x6e,0x20,0x68
.db 0x6f,0x75,0x73,0x65,0x2e,0x0a,0x0a,0x54
.db 0x6f,0x20,0x74,0x68,0x61,0x74,0x20,0x77
.db 0x6f,0x72,0x6c,0x64,0x20,0x61,0x73,0x73
.db 0x65,0x6d,0x62,0x6c,0x79,0x20,0x6f,0x66
.db 0x20,0x73,0x6f,0x76,0x65,0x72,0x65,0x69
.db 0x67,0x6e,0x20,0x73,0x74,0x61,0x74,0x65
.db 0x73,0x2c,0x20,0x74,0x68,0x65,0x20,0x55
.db 0x6e,0x69,0x74,0x65,0x64,0x20,0x4e,0x61
.db 0x74,0x69,0x6f,0x6e,0x73,0x2c,0x20,0x6f
.db 0x75,0x72,0x20,0x6c,0x61,0x73,0x74,0x20
.db 0x62,0x65,0x73,0x74,0x20,0x68,0x6f,0x70
.db 0x65,0x20,0x69,0x6e,0x20,0x61,0x6e,0x20
.db 0x61,0x67,0x65,0x20,0x77,0x68,0x65,0x72
.db 0x65,0x20,0x74,0x68,0x65,0x20,0x69,0x6e
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.db 0x73,0x74,0x72,0x75,0x6d,0x65,0x6e,0x74
.db 0x73,0x20,0x6f,0x66,0x20,0x77,0x61,0x72
.db 0x20,0x68,0x61,0x76,0x65,0x20,0x66,0x61
.db 0x72,0x20,0x6f,0x75,0x74,0x70,0x61,0x63
.db 0x65,0x64,0x20,0x74,0x68,0x65,0x20,0x69
.db 0x6e,0x73,0x74,0x72,0x75,0x6d,0x65,0x6e
.db 0x74,0x73,0x20,0x6f,0x66,0x20,0x70,0x65
.db 0x61,0x63,0x65,0x2c,0x20,0x77,0x65,0x20
.db 0x72,0x65,0x6e,0x65,0x77,0x20,0x6f,0x75
.db 0x72,0x20,0x70,0x6c,0x65,0x64,0x67,0x65
.db 0x20,0x6f,0x66,0x20,0x73,0x75,0x70,0x70
.db 0x6f,0x72,0x74,0x2d,0x2d,0x74,0x6f,0x20
.db 0x70,0x72,0x65,0x76,0x65,0x6e,0x74,0x20
.db 0x69,0x74,0x20,0x66,0x72,0x6f,0x6d,0x20
.db 0x62,0x65,0x63,0x6f,0x6d,0x69,0x6e,0x67
.db 0x20,0x6d,0x65,0x72,0x65,0x6c,0x79,0x20
.db 0x61,0x20,0x66,0x6f,0x72,0x75,0x6d,0x20
.db 0x66,0x6f,0x72,0x20,0x69,0x6e,0x76,0x65
.db 0x63,0x74,0x69,0x76,0x65,0x2d,0x2d,0x74
.db 0x6f,0x20,0x73,0x74,0x72,0x65,0x6e,0x67
.db 0x74,0x68,0x65,0x6e,0x20,0x69,0x74,0x73
.db 0x20,0x73,0x68,0x69,0x65,0x6c,0x64,0x20
.db 0x6f,0x66,0x20,0x74,0x68,0x65,0x20,0x6e
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.db 0x68,0x65,0x20,0x77,0x65,0x61,0x6b,0x2d
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.db 0x65,0x6e,0x6c,0x61,0x72,0x67,0x65,0x20
.db 0x74,0x68,0x65,0x20,0x61,0x72,0x65,0x61
.db 0x20,0x69,0x6e,0x20,0x77,0x68,0x69,0x63
.db 0x68,0x20,0x69,0x74,0x73,0x20,0x77,0x72
.db 0x69,0x74,0x20,0x6d,0x61,0x79,0x20,0x72
.db 0x75,0x6e,0x2e,0x0a,0x0a,0x46,0x69,0x6e
.db 0x61,0x6c,0x6c,0x79,0x2c,0x20,0x74,0x6f
.db 0x20,0x74,0x68,0x6f,0x73,0x65,0x20,0x6e
.db 0x61,0x74,0x69,0x6f,0x6e,0x73,0x20,0x77
.db 0x68,0x6f,0x20,0x77,0x6f,0x75,0x6c,0x64
.db 0x20,0x6d,0x61,0x6b,0x65,0x20,0x74,0x68
.db 0x65,0x6d,0x73,0x65,0x6c,0x76,0x65,0x73
.db 0x20,0x6f,0x75,0x72,0x20,0x61,0x64,0x76
.db 0x65,0x72,0x73,0x61,0x72,0x79,0x2c,0x20
.db 0x77,0x65,0x20,0x6f,0x66,0x66,0x65,0x72
.db 0x20,0x6e,0x6f,0x74,0x20,0x61,0x20,0x70
.db 0x6c,0x65,0x64,0x67,0x65,0x20,0x62,0x75
.db 0x74,0x20,0x61,0x20,0x72,0x65,0x71,0x75
.db 0x65,0x73,0x74,0x3a,0x20,0x74,0x68,0x61
.db 0x74,0x20,0x62,0x6f,0x74,0x68,0x20,0x73
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.db 0x69,0x6e,0x20,0x61,0x6e,0x65,0x77,0x20
.db 0x74,0x68,0x65,0x20,0x71,0x75,0x65,0x73
.db 0x74,0x20,0x66,0x6f,0x72,0x20,0x70,0x65
.db 0x61,0x63,0x65,0x2c,0x20,0x62,0x65,0x66
.db 0x6f,0x72,0x65,0x20,0x74,0x68,0x65,0x20
.db 0x64,0x61,0x72,0x6b,0x20,0x70,0x6f,0x77
.db 0x65,0x72,0x73,0x20,0x6f,0x66,0x20,0x64
.db 0x65,0x73,0x74,0x72,0x75,0x63,0x74,0x69
.db 0x6f,0x6e,0x20,0x75,0x6e,0x6c,0x65,0x61
.db 0x73,0x68,0x65,0x64,0x20,0x62,0x79,0x20
.db 0x73,0x63,0x69,0x65,0x6e,0x63,0x65,0x20
.db 0x65,0x6e,0x67,0x75,0x6c,0x66,0x20,0x61
.db 0x6c,0x6c,0x20,0x68,0x75,0x6d,0x61,0x6e
.db 0x69,0x74,0x79,0x20,0x69,0x6e,0x20,0x70
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EEL4744C – Microprocessor Applications
Revision: **0**
Lab 4 Report: EBI

Miller, Steven
Class #: 11318
Anthony Stross
June 11, 2023

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.db 0x6c,0x61,0x6e,0x6e,0x65,0x64,0x20,0x6f
.db 0x72,0x20,0x61,0x63,0x63,0x69,0x64,0x65
.db 0x6e,0x74,0x61,0x6c,0x20,0x73,0x65,0x6c
.db 0x66,0x2d,0x64,0x65,0x73,0x74,0x72,0x75
.db 0x63,0x74,0x69,0x6f,0x6e,0x2e,0x0a,0x0a
.db 0x57,0x65,0x20,0x64,0x61,0x72,0x65,0x20
.db 0x6e,0x6f,0x74,0x20,0x74,0x65,0x6d,0x70
.db 0x74,0x20,0x74,0x68,0x65,0x6d,0x20,0x77
.db 0x69,0x74,0x68,0x20,0x77,0x65,0x61,0x6b
.db 0x6e,0x65,0x73,0x73,0x2e,0x20,0x46,0x6f
.db 0x72,0x20,0x6f,0x6e,0x6c,0x79,0x20,0x77
.db 0x68,0x65,0x6e,0x20,0x6f,0x75,0x72,0x20
.db 0x61,0x72,0x6d,0x73,0x20,0x61,0x72,0x65
.db 0x20,0x73,0x75,0x66,0x66,0x69,0x63,0x69
.db 0x65,0x6e,0x74,0x20,0x62,0x65,0x79,0x6f
.db 0x6e,0x64,0x20,0x64,0x6f,0x75,0x62,0x74
.db 0x20,0x63,0x61,0x6e,0x20,0x77,0x65,0x20
.db 0x62,0x65,0x20,0x63,0x65,0x72,0x74,0x61
.db 0x69,0x6e,0x20,0x62,0x65,0x79,0x6f,0x6e
.db 0x64,0x20,0x64,0x6f,0x75,0x62,0x74,0x20
.db 0x74,0x68,0x61,0x74,0x20,0x74,0x68,0x65
.db 0x79,0x20,0x77,0x69,0x6c,0x6c,0x20,0x6e
.db 0x65,0x76,0x65,0x72,0x20,0x62,0x65,0x20
.db 0x65,0x6d,0x70,0x6c,0x6f,0x79,0x65,0x64
.db 0x2e,0x0a,0x0a,0x42,0x75,0x74,0x20,0x6e
.db 0x65,0x69,0x74,0x68,0x65,0x72,0x20,0x63
.db 0x61,0x6e,0x20,0x74,0x77,0x6f,0x20,0x67
.db 0x72,0x65,0x61,0x74,0x20,0x61,0x6e,0x64
.db 0x20,0x70,0x6f,0x77,0x65,0x72,0x66,0x75
.db 0x6c,0x20,0x67,0x72,0x6f,0x75,0x70,0x73
.db 0x20,0x6f,0x66,0x20,0x6e,0x61,0x74,0x69
.db 0x6f,0x6e,0x73,0x20,0x74,0x61,0x6b,0x65
.db 0x20,0x63,0x6f,0x6d,0x66,0x6f,0x72,0x74
.db 0x20,0x66,0x72,0x6f,0x6d,0x20,0x6f,0x75
.db 0x72,0x20,0x70,0x72,0x65,0x73,0x65,0x6e
.db 0x74,0x20,0x63,0x6f,0x75,0x72,0x73,0x65
.db 0x2d,0x2d,0x62,0x6f,0x74,0x68,0x20,0x73
.db 0x69,0x64,0x65,0x73,0x20,0x6f,0x76,0x65
.db 0x72,0x62,0x75,0x72,0x64,0x65,0x6e,0x65
.db 0x64,0x20,0x62,0x79,0x20,0x74,0x68,0x65
.db 0x20,0x63,0x6f,0x73,0x74,0x20,0x6f,0x66
.db 0x20,0x6d,0x6f,0x64,0x65,0x72,0x6e,0x20
.db 0x77,0x65,0x61,0x70,0x6f,0x6e,0x73,0x2c
.db 0x20,0x62,0x6f,0x74,0x68,0x20,0x72,0x69
.db 0x67,0x68,0x74,0x6c,0x79,0x20,0x61,0x6c
.db 0x61,0x72,0x6d,0x65,0x64,0x20,0x62,0x79
.db 0x20,0x74,0x68,0x65,0x20,0x73,0x74,0x65
.db 0x61,0x64,0x79,0x20,0x73,0x70,0x72,0x65
.db 0x61,0x64,0x20,0x6f,0x66,0x20,0x74,0x68
.db 0x65,0x20,0x64,0x65,0x61,0x64,0x6c,0x79
.db 0x20,0x61,0x74,0x6f,0x6d,0x2c,0x20,0x79
.db 0x65,0x74,0x20,0x62,0x6f,0x74,0x68,0x20
.db 0x72,0x61,0x63,0x69,0x6e,0x67,0x20,0x74
.db 0x6f,0x20,0x61,0x6c,0x74,0x65,0x72,0x20
.db 0x74,0x68,0x61,0x74,0x20,0x75,0x6e,0x63
.db 0x65,0x72,0x74,0x61,0x69,0x6e,0x20,0x62
.db 0x61,0x6c,0x61,0x6e,0x63,0x65,0x20,0x6f
.db 0x66,0x20,0x74,0x65,0x72,0x72,0x6f,0x72
.db 0x20,0x74,0x68,0x61,0x74,0x20,0x73,0x74
.db 0x61,0x79,0x73,0x20,0x74,0x68,0x65,0x20
.db 0x68,0x61,0x6e,0x64,0x20,0x6f,0x66,0x20
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EEL4744C – Microprocessor Applications
Revision: **0**
Lab 4 Report: EBI

Miller, Steven
Class #: 11318
Anthony Stross
June 11, 2023

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.db 0x6d,0x61,0x6e,0x6b,0x69,0x6e,0x64,0x27
.db 0x73,0x20,0x66,0x69,0x6e,0x61,0x6c,0x20
.db 0x77,0x61,0x72,0x2e,0x0a,0x0a,0x53,0x6f
.db 0x20,0x6c,0x65,0x74,0x20,0x75,0x73,0x20
.db 0x62,0x65,0x67,0x69,0x6e,0x20,0x61,0x6e
.db 0x65,0x77,0x2d,0x2d,0x72,0x65,0x6d,0x65
.db 0x6d,0x62,0x65,0x72,0x69,0x6e,0x67,0x20
.db 0x6f,0x6e,0x20,0x62,0x6f,0x74,0x68,0x20
.db 0x73,0x69,0x64,0x65,0x73,0x20,0x74,0x68
.db 0x61,0x74,0x20,0x63,0x69,0x76,0x69,0x6c
.db 0x69,0x74,0x79,0x20,0x69,0x73,0x20,0x6e
.db 0x6f,0x74,0x20,0x61,0x20,0x73,0x69,0x67
.db 0x6e,0x20,0x6f,0x66,0x20,0x77,0x65,0x61
.db 0x6b,0x6e,0x65,0x73,0x73,0x2c,0x20,0x61
.db 0x6e,0x64,0x20,0x73,0x69,0x6e,0x63,0x65
.db 0x72,0x69,0x74,0x79,0x20,0x69,0x73,0x20
.db 0x61,0x6c,0x77,0x61,0x79,0x73,0x20,0x73
.db 0x75,0x62,0x6a,0x65,0x63,0x74,0x20,0x74
.db 0x6f,0x20,0x70,0x72,0x6f,0x6f,0x66,0x2e
.db 0x20,0x4c,0x65,0x74,0x20,0x75,0x73,0x20
.db 0x6e,0x65,0x76,0x65,0x72,0x20,0x6e,0x65
.db 0x67,0x6f,0x74,0x69,0x61,0x74,0x65,0x20
.db 0x6f,0x75,0x74,0x20,0x6f,0x66,0x20,0x66
.db 0x65,0x61,0x72,0x2e,0x20,0x42,0x75,0x74
.db 0x20,0x6c,0x65,0x74,0x20,0x75,0x73,0x20
.db 0x6e,0x65,0x76,0x65,0x72,0x20,0x66,0x65
.db 0x61,0x72,0x20,0x74,0x6f,0x20,0x6e,0x65
.db 0x67,0x6f,0x74,0x69,0x61,0x74,0x65,0x2e
.db 0x0a,0x0a,0x4c,0x65,0x74,0x20,0x62,0x6f
.db 0x74,0x68,0x20,0x73,0x69,0x64,0x65,0x73
.db 0x20,0x65,0x78,0x70,0x6c,0x6f,0x72,0x65
.db 0x20,0x77,0x68,0x61,0x74,0x20,0x70,0x72
.db 0x6f,0x62,0x6c,0x65,0x6d,0x73,0x20,0x75
.db 0x6e,0x69,0x74,0x65,0x20,0x75,0x73,0x20
.db 0x69,0x6e,0x73,0x74,0x65,0x61,0x64,0x20
.db 0x6f,0x66,0x20,0x62,0x65,0x6c,0x61,0x62
.db 0x6f,0x72,0x69,0x6e,0x67,0x20,0x74,0x68
.db 0x6f,0x73,0x65,0x20,0x70,0x72,0x6f,0x62
.db 0x6c,0x65,0x6d,0x73,0x20,0x77,0x68,0x69
.db 0x63,0x68,0x20,0x64,0x69,0x76,0x69,0x64
.db 0x65,0x20,0x75,0x73,0x2e,0x0a,0x0a,0x4c
.db 0x65,0x74,0x20,0x62,0x6f,0x74,0x68,0x20
.db 0x73,0x69,0x64,0x65,0x73,0x2c,0x20,0x66
.db 0x6f,0x72,0x20,0x74,0x68,0x65,0x20,0x66
.db 0x69,0x72,0x73,0x74,0x20,0x74,0x69,0x6d
.db 0x65,0x2c,0x20,0x66,0x6f,0x72,0x6d,0x75
.db 0x6c,0x61,0x74,0x65,0x20,0x73,0x65,0x72
.db 0x69,0x6f,0x75,0x73,0x20,0x61,0x6e,0x64
.db 0x20,0x70,0x72,0x65,0x63,0x69,0x73,0x65
.db 0x20,0x70,0x72,0x6f,0x70,0x6f,0x73,0x61
.db 0x6c,0x73,0x20,0x66,0x6f,0x72,0x20,0x74
.db 0x68,0x65,0x20,0x69,0x6e,0x73,0x70,0x65
.db 0x63,0x74,0x69,0x6f,0x6e,0x20,0x61,0x6e
.db 0x64,0x20,0x63,0x6f,0x6e,0x74,0x72,0x6f
.db 0x6c,0x20,0x6f,0x66,0x20,0x61,0x72,0x6d
.db 0x73,0x2d,0x2d,0x61,0x6e,0x64,0x20,0x62
.db 0x72,0x69,0x6e,0x67,0x20,0x74,0x68,0x65
.db 0x20,0x61,0x62,0x73,0x6f,0x6c,0x75,0x74
.db 0x65,0x20,0x70,0x6f,0x77,0x65,0x72,0x20
.db 0x74,0x6f,0x20,0x64,0x65,0x73,0x74,0x72
.db 0x6f,0x79,0x20,0x6f,0x74,0x68,0x65,0x72
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EEL4744C – Microprocessor Applications
Revision: **0**
Lab 4 Report: EBI

Miller, Steven
Class #: 11318
Anthony Stross
June 11, 2023

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.db 0x20,0x6e,0x61,0x74,0x69,0x6f,0x6e,0x73
.db 0x20,0x75,0x6e,0x64,0x65,0x72,0x20,0x74
.db 0x68,0x65,0x20,0x61,0x62,0x73,0x6f,0x6c
.db 0x75,0x74,0x65,0x20,0x63,0x6f,0x6e,0x74
.db 0x72,0x6f,0x6c,0x20,0x6f,0x66,0x20,0x61
.db 0x6c,0x6c,0x20,0x6e,0x61,0x74,0x69,0x6f
.db 0x6e,0x73,0x2e,0x0a,0x0a,0x4c,0x65,0x74
.db 0x20,0x62,0x6f,0x74,0x68,0x20,0x73,0x69
.db 0x64,0x65,0x73,0x20,0x73,0x65,0x65,0x6b
.db 0x20,0x74,0x6f,0x20,0x69,0x6e,0x76,0x6f
.db 0x6b,0x65,0x20,0x74,0x68,0x65,0x20,0x77
.db 0x6f,0x6e,0x64,0x65,0x72,0x73,0x20,0x6f
.db 0x66,0x20,0x73,0x63,0x69,0x65,0x6e,0x63
.db 0x65,0x20,0x69,0x6e,0x73,0x74,0x65,0x61
.db 0x64,0x20,0x6f,0x66,0x20,0x69,0x74,0x73
.db 0x20,0x74,0x65,0x72,0x72,0x6f,0x72,0x73
.db 0x2e,0x20,0x54,0x6f,0x67,0x65,0x74,0x68
.db 0x65,0x72,0x20,0x6c,0x65,0x74,0x20,0x75
.db 0x73,0x20,0x65,0x78,0x70,0x6c,0x6f,0x72
.db 0x65,0x20,0x74,0x68,0x65,0x20,0x73,0x74
.db 0x61,0x72,0x73,0x2c,0x20,0x63,0x6f,0x6e
.db 0x71,0x75,0x65,0x72,0x20,0x74,0x68,0x65
.db 0x20,0x64,0x65,0x73,0x65,0x72,0x74,0x73
.db 0x2c,0x20,0x65,0x72,0x61,0x64,0x69,0x63
.db 0x61,0x74,0x65,0x20,0x64,0x69,0x73,0x65
.db 0x61,0x73,0x65,0x2c,0x20,0x74,0x61,0x70
.db 0x20,0x74,0x68,0x65,0x20,0x6f,0x63,0x65
.db 0x61,0x6e,0x20,0x64,0x65,0x70,0x74,0x68
.db 0x73,0x2c,0x20,0x61,0x6e,0x64,0x20,0x65
.db 0x6e,0x63,0x6f,0x75,0x72,0x61,0x67,0x65
.db 0x20,0x74,0x68,0x65,0x20,0x61,0x72,0x74
.db 0x73,0x20,0x61,0x6e,0x64,0x20,0x63,0x6f
.db 0x6d,0x6d,0x65,0x72,0x63,0x65,0x2e,0x0a
.db 0x0a,0x4c,0x65,0x74,0x20,0x62,0x6f,0x74
.db 0x68,0x20,0x73,0x69,0x64,0x65,0x73,0x20
.db 0x75,0x6e,0x69,0x74,0x65,0x20,0x74,0x6f
.db 0x20,0x68,0x65,0x65,0x64,0x20,0x69,0x6e
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.db 0x20,0x49,0x73,0x61,0x69,0x61,0x68,0x2d
.db 0x2d,0x74,0x6f,0x20,0x22,0x75,0x6e,0x64
.db 0x6f,0x20,0x74,0x68,0x65,0x20,0x68,0x65
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.db 0x61,0x6e,0x64,0x20,0x74,0x6f,0x20,0x6c
.db 0x65,0x74,0x20,0x74,0x68,0x65,0x20,0x6f
.db 0x70,0x70,0x72,0x65,0x73,0x73,0x65,0x64
.db 0x20,0x67,0x6f,0x20,0x66,0x72,0x65,0x65
.db 0x2e,0x22,0x0a,0x0a,0x41,0x6e,0x64,0x20
.db 0x69,0x66,0x20,0x61,0x20,0x62,0x65,0x61
.db 0x63,0x68,0x68,0x65,0x61,0x64,0x20,0x6f
.db 0x66,0x20,0x63,0x6f,0x6f,0x70,0x65,0x72
.db 0x61,0x74,0x69,0x6f,0x6e,0x20,0x6d,0x61
.db 0x79,0x20,0x70,0x75,0x73,0x68,0x20,0x62
.db 0x61,0x63,0x6b,0x20,0x74,0x68,0x65,0x20
.db 0x6a,0x75,0x6e,0x67,0x6c,0x65,0x20,0x6f
.db 0x66,0x20,0x73,0x75,0x73,0x70,0x69,0x63
.db 0x69,0x6f,0x6e,0x2c,0x20,0x6c,0x65,0x74
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EEL4744C – Microprocessor Applications
Revision: 0
Lab 4 Report: EBI

Miller, Steven
Class #: 11318
Anthony Stross
June 11, 2023

```
.db 0x20,0x62,0x6f,0x74,0x68,0x20,0x73,0x69
.db 0x64,0x65,0x73,0x20,0x6a,0x6f,0x69,0x6e
.db 0x20,0x69,0x6e,0x20,0x63,0x72,0x65,0x61
.db 0x74,0x69,0x6e,0x67,0x20,0x61,0x20,0x6e
.db 0x65,0x77,0x20,0x65,0x6e,0x64,0x65,0x61
.db 0x76,0x6f,0x72,0x2c,0x20,0x6e,0x6f,0x74
.db 0x20,0x61,0x20,0x6e,0x65,0x77,0x20,0x62
.db 0x61,0x6c,0x61,0x6e,0x63,0x65,0x20,0x6f
.db 0x66,0x20,0x70,0x6f,0x77,0x65,0x72,0x2c
.db 0x20,0x62,0x75,0x74,0x20,0x61,0x20,0x6e
.db 0x65,0x77,0x20,0x77,0x6f,0x72,0x6c,0x64
.db 0x20,0x6f,0x66,0x20,0x6c,0x61,0x77,0x2c
.db 0x20,0x77,0x68,0x65,0x72,0x65,0x20,0x74
.db 0x68,0x65,0x20,0x73,0x74,0x72,0x6f,0x6e
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.db 0x65,0x61,0x63,0x65,0x20,0x70,0x72,0x65
.db 0x73,0x65,0x72,0x76,0x65,0x64,0x2e,0x0a
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.db 0x6e,0x20,0x74,0x68,0x65,0x20,0x66,0x69
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.db 0x69,0x73,0x68,0x65,0x64,0x20,0x69,0x6e
.db 0x20,0x74,0x68,0x65,0x20,0x66,0x69,0x72
.db 0x73,0x74,0x20,0x31,0x2c,0x30,0x30,0x30
.db 0x20,0x64,0x61,0x79,0x73,0x2c,0x20,0x6e
.db 0x6f,0x72,0x20,0x69,0x6e,0x20,0x74,0x68
.db 0x65,0x20,0x6c,0x69,0x66,0x65,0x20,0x6f
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.db 0x7a,0x65,0x6e,0x73,0x2c,0x20,0x6d,0x6f
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.db 0x69,0x6e,0x20,0x6d,0x69,0x6e,0x65,0x2c
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.db 0x73,0x74,0x20,0x74,0x68,0x65,0x20,0x66
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.db 0x66,0x61,0x69,0x6c,0x75,0x72,0x65,0x20
.db 0x6f,0x66,0x20,0x6f,0x75,0x72,0x20,0x63
.db 0x6f,0x75,0x72,0x73,0x65,0x2e,0x20,0x53
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.db 0x69,0x6e,0x63,0x65,0x20,0x74,0x68,0x69
.db 0x73,0x20,0x63,0x6f,0x75,0x6e,0x74,0x72
.db 0x79,0x20,0x77,0x61,0x73,0x20,0x66,0x6f
.db 0x75,0x6e,0x64,0x65,0x64,0x2c,0x20,0x65
.db 0x61,0x63,0x68,0x20,0x67,0x65,0x6e,0x65
.db 0x72,0x61,0x74,0x69,0x6f,0x6e,0x20,0x6f
.db 0x66,0x20,0x41,0x6d,0x65,0x72,0x69,0x63
.db 0x61,0x6e,0x73,0x20,0x68,0x61,0x73,0x20
.db 0x62,0x65,0x65,0x6e,0x20,0x73,0x75,0x6d
.db 0x6d,0x6f,0x6e,0x65,0x64,0x20,0x74,0x6f
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.db 0x73,0x74,0x69,0x6d,0x6f,0x6e,0x79,0x20
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.db 0x6f,0x75,0x6e,0x67,0x20,0x41,0x6d,0x65
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.db 0x68,0x6f,0x20,0x61,0x6e,0x73,0x77,0x65
.db 0x72,0x65,0x64,0x20,0x74,0x68,0x65,0x20
.db 0x63,0x61,0x6c,0x6c,0x20,0x74,0x6f,0x20
.db 0x73,0x65,0x72,0x76,0x69,0x63,0x65,0x20
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.db 0x63,0x61,0x6c,0x6c,0x20,0x74,0x6f,0x20
.db 0x62,0x65,0x61,0x72,0x20,0x61,0x72,0x6d
.db 0x73,0x2c,0x20,0x74,0x68,0x6f,0x75,0x67
.db 0x68,0x20,0x61,0x72,0x6d,0x73,0x20,0x77
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.db 0x20,0x63,0x61,0x6c,0x6c,0x20,0x74,0x6f
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.db 0x63,0x61,0x6c,0x6c,0x20,0x74,0x6f,0x20
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.db 0x20,0x62,0x75,0x72,0x64,0x65,0x6e,0x20
.db 0x6f,0x66,0x20,0x61,0x20,0x6c,0x6f,0x6e
.db 0x67,0x20,0x74,0x77,0x69,0x6c,0x69,0x67
.db 0x68,0x74,0x20,0x73,0x74,0x72,0x75,0x67
.db 0x67,0x6c,0x65,0x2c,0x20,0x79,0x65,0x61
.db 0x72,0x20,0x69,0x6e,0x20,0x61,0x6e,0x64
.db 0x20,0x79,0x65,0x61,0x72,0x20,0x6f,0x75
.db 0x74,0x2c,0x20,0x22,0x72,0x65,0x6a,0x6f
.db 0x69,0x63,0x69,0x6e,0x67,0x20,0x69,0x6e
.db 0x20,0x68,0x6f,0x70,0x65,0x2c,0x20,0x70
.db 0x61,0x74,0x69,0x65,0x6e,0x74,0x20,0x69
.db 0x6e,0x20,0x74,0x72,0x69,0x62,0x75,0x6c
.db 0x61,0x74,0x69,0x6f,0x6e,0x22,0x2d,0x2d
.db 0x61,0x20,0x73,0x74,0x72,0x75,0x67,0x67
.db 0x6c,0x65,0x20,0x61,0x67,0x61,0x69,0x6e
.db 0x73,0x74,0x20,0x74,0x68,0x65,0x20,0x63
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EEL4744C – Microprocessor Applications
Revision: **0**
Lab 4 Report: EBI

Miller, Steven
Class #: 11318
Anthony Stross
June 11, 2023

```
.db 0x6f,0x6d,0x6d,0x6f,0x6e,0x20,0x65,0x6e
.db 0x65,0x6d,0x69,0x65,0x73,0x20,0x6f,0x66
.db 0x20,0x6d,0x61,0x6e,0x3a,0x20,0x74,0x79
.db 0x72,0x61,0x6e,0x6e,0x79,0x2c,0x20,0x70
.db 0x6f,0x76,0x65,0x72,0x74,0x79,0x2c,0x20
.db 0x64,0x69,0x73,0x65,0x61,0x73,0x65,0x2c
.db 0x20,0x61,0x6e,0x64,0x20,0x77,0x61,0x72
.db 0x20,0x69,0x74,0x73,0x65,0x6c,0x66,0x2e
.db 0x0a,0x0a,0x43,0x61,0x6e,0x20,0x77,0x65
.db 0x20,0x66,0x6f,0x72,0x67,0x65,0x20,0x61
.db 0x67,0x61,0x69,0x6e,0x73,0x74,0x20,0x74
.db 0x68,0x65,0x73,0x65,0x20,0x65,0x6e,0x65
.db 0x6d,0x69,0x65,0x73,0x20,0x61,0x20,0x67
.db 0x72,0x61,0x6e,0x64,0x20,0x61,0x6e,0x64
.db 0x20,0x67,0x6c,0x6f,0x62,0x61,0x6c,0x20
.db 0x61,0x6c,0x6c,0x69,0x61,0x6e,0x63,0x65
.db 0x2c,0x20,0x4e,0x6f,0x72,0x74,0x68,0x20
.db 0x61,0x6e,0x64,0x20,0x53,0x6f,0x75,0x74
.db 0x68,0x2c,0x20,0x45,0x61,0x73,0x74,0x20
.db 0x61,0x6e,0x64,0x20,0x57,0x65,0x73,0x74
.db 0x2c,0x20,0x74,0x68,0x61,0x74,0x20,0x63
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.db 0x65,0x20,0x61,0x20,0x6d,0x6f,0x72,0x65
.db 0x20,0x66,0x72,0x75,0x69,0x74,0x66,0x75
.db 0x6c,0x20,0x6c,0x69,0x66,0x65,0x20,0x66
.db 0x6f,0x72,0x20,0x61,0x6c,0x6c,0x20,0x6d
.db 0x61,0x6e,0x6b,0x69,0x6e,0x64,0x3f,0x20
.db 0x57,0x69,0x6c,0x6c,0x20,0x79,0x6f,0x75
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.db 0x6f,0x6e,0x67,0x20,0x68,0x69,0x73,0x74
.db 0x6f,0x72,0x79,0x20,0x6f,0x66,0x20,0x74
.db 0x68,0x65,0x20,0x77,0x6f,0x72,0x6c,0x64
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.db 0x20,0x68,0x61,0x76,0x65,0x20,0x62,0x65
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.db 0x20,0x66,0x72,0x65,0x65,0x64,0x6f,0x6d
.db 0x20,0x69,0x6e,0x20,0x69,0x74,0x73,0x20
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.db 0x6d,0x61,0x78,0x69,0x6d,0x75,0x6d,0x20
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.db 0x20,0x73,0x68,0x72,0x69,0x6e,0x6b,0x20
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.db 0x73,0x20,0x72,0x65,0x73,0x70,0x6f,0x6e
.db 0x73,0x69,0x62,0x69,0x6c,0x69,0x74,0x79
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.db 0x20,0x62,0x65,0x6c,0x69,0x65,0x76,0x65
.db 0x20,0x74,0x68,0x61,0x74,0x20,0x61,0x6e
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.db 0x77,0x6f,0x75,0x6c,0x64,0x20,0x65,0x78
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EEL4744C – Microprocessor Applications
Revision: **0**
Lab 4 Report: EBI

Miller, Steven
Class #: 11318
Anthony Stross
June 11, 2023

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.db 0x63,0x68,0x61,0x6e,0x67,0x65,0x20,0x70
.db 0x6c,0x61,0x63,0x65,0x73,0x20,0x77,0x69
.db 0x74,0x68,0x20,0x61,0x6e,0x79,0x20,0x6f
.db 0x74,0x68,0x65,0x72,0x20,0x70,0x65,0x6f
.db 0x70,0x6c,0x65,0x20,0x6f,0x72,0x20,0x61
.db 0x6e,0x79,0x20,0x6f,0x74,0x68,0x65,0x72
.db 0x20,0x67,0x65,0x6e,0x65,0x72,0x61,0x74
.db 0x69,0x6f,0x6e,0x2e,0x20,0x54,0x68,0x65
.db 0x20,0x65,0x6e,0x65,0x72,0x67,0x79,0x2c
.db 0x20,0x74,0x68,0x65,0x20,0x66,0x61,0x69
.db 0x74,0x68,0x2c,0x20,0x74,0x68,0x65,0x20
.db 0x64,0x65,0x76,0x6f,0x74,0x69,0x6f,0x6e
.db 0x20,0x77,0x68,0x69,0x63,0x68,0x20,0x77
.db 0x65,0x20,0x62,0x72,0x69,0x6e,0x67,0x20
.db 0x74,0x6f,0x20,0x74,0x68,0x69,0x73,0x20
.db 0x65,0x6e,0x64,0x65,0x61,0x76,0x6f,0x72
.db 0x20,0x77,0x69,0x6c,0x6c,0x20,0x6c,0x69
.db 0x67,0x68,0x74,0x20,0x6f,0x75,0x72,0x20
.db 0x63,0x6f,0x75,0x6e,0x74,0x72,0x79,0x20
.db 0x61,0x6e,0x64,0x20,0x61,0x6c,0x6c,0x20
.db 0x77,0x68,0x6f,0x20,0x73,0x65,0x72,0x76
.db 0x65,0x20,0x69,0x74,0x2d,0x2d,0x61,0x6e
.db 0x64,0x20,0x74,0x68,0x65,0x20,0x67,0x6c
.db 0x6f,0x77,0x20,0x66,0x72,0x6f,0x6d,0x20
.db 0x74,0x68,0x61,0x74,0x20,0x66,0x69,0x72
.db 0x65,0x20,0x63,0x61,0x6e,0x20,0x74,0x72
.db 0x75,0x6c,0x79,0x20,0x6c,0x69,0x67,0x68
.db 0x74,0x20,0x74,0x68,0x65,0x20,0x77,0x6f
.db 0x72,0x6c,0x64,0x2e,0x0a,0x0a,0x41,0x6e
.db 0x64,0x20,0x73,0x6f,0x2c,0x20,0x6d,0x79
.db 0x20,0x66,0x65,0x6c,0x6c,0x6f,0x77,0x20
.db 0x41,0x6d,0x65,0x72,0x69,0x63,0x61,0x6e
.db 0x73,0x3a,0x20,0x61,0x73,0x6b,0x20,0x6e
.db 0x6f,0x74,0x20,0x77,0x68,0x61,0x74,0x20
.db 0x79,0x6f,0x75,0x72,0x20,0x63,0x6f,0x75
.db 0x6e,0x74,0x72,0x79,0x20,0x63,0x61,0x6e
.db 0x20,0x64,0x6f,0x20,0x66,0x6f,0x72,0x20
.db 0x79,0x6f,0x75,0x2d,0x2d,0x61,0x73,0x6b
.db 0x20,0x77,0x68,0x61,0x74,0x20,0x79,0x6f
.db 0x75,0x20,0x63,0x61,0x6e,0x20,0x64,0x6f
.db 0x20,0x66,0x6f,0x72,0x20,0x79,0x6f,0x75
.db 0x72,0x20,0x63,0x6f,0x75,0x6e,0x74,0x72
.db 0x79,0x2e,0x0a,0x0a,0x4d,0x79,0x20,0x66
.db 0x65,0x6c,0x6c,0x6f,0x77,0x20,0x63,0x69
.db 0x74,0x69,0x7a,0x65,0x6e,0x73,0x20,0x6f
.db 0x66,0x20,0x74,0x68,0x65,0x20,0x77,0x6f
.db 0x72,0x6c,0x64,0x3a,0x20,0x61,0x73,0x6b
.db 0x20,0x6e,0x6f,0x74,0x20,0x77,0x68,0x61
.db 0x74,0x20,0x41,0x6d,0x65,0x72,0x69,0x63
.db 0x61,0x20,0x77,0x69,0x6c,0x6c,0x20,0x64
.db 0x6f,0x20,0x66,0x6f,0x72,0x20,0x79,0x6f
.db 0x75,0x2c,0x20,0x62,0x75,0x74,0x20,0x77
.db 0x68,0x61,0x74,0x20,0x74,0x6f,0x67,0x65
.db 0x74,0x68,0x65,0x72,0x20,0x77,0x65,0x20
.db 0x63,0x61,0x6e,0x20,0x64,0x6f,0x20,0x66
.db 0x6f,0x72,0x20,0x74,0x68,0x65,0x20,0x66
.db 0x72,0x65,0x65,0x64,0x6f,0x6d,0x20,0x6f
.db 0x66,0x20,0x6d,0x61,0x6e,0x2e,0x0a,0x0a
.db 0x46,0x69,0x6e,0x61,0x6c,0x6c,0x79,0x2c
.db 0x20,0x77,0x68,0x65,0x74,0x68,0x65,0x72
.db 0x20,0x79,0x6f,0x75,0x20,0x61,0x72,0x65
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.db 0x20,0x63,0x69,0x74,0x69,0x7a,0x65,0x6e
.db 0x73,0x20,0x6f,0x66,0x20,0x41,0x6d,0x65
.db 0x72,0x69,0x63,0x61,0x20,0x6f,0x72,0x20
.db 0x63,0x69,0x74,0x69,0x7a,0x65,0x6e,0x73
.db 0x20,0x6f,0x66,0x20,0x74,0x68,0x65,0x20
.db 0x77,0x6f,0x72,0x6c,0x64,0x2c,0x20,0x61
.db 0x73,0x6b,0x20,0x6f,0x66,0x20,0x75,0x73
.db 0x20,0x74,0x68,0x65,0x20,0x73,0x61,0x6d
.db 0x65,0x20,0x68,0x69,0x67,0x68,0x20,0x73
.db 0x74,0x61,0x6e,0x64,0x61,0x72,0x64,0x73
.db 0x20,0x6f,0x66,0x20,0x73,0x74,0x72,0x65
.db 0x6e,0x67,0x74,0x68,0x20,0x61,0x6e,0x64
.db 0x20,0x73,0x61,0x63,0x72,0x69,0x66,0x69
.db 0x63,0x65,0x20,0x77,0x68,0x69,0x63,0x68
.db 0x20,0x77,0x65,0x20,0x61,0x73,0x6b,0x20
.db 0x6f,0x66,0x20,0x79,0x6f,0x75,0x2e,0x20
.db 0x57,0x69,0x74,0x68,0x20,0x61,0x20,0x67
.db 0x6f,0x6f,0x64,0x20,0x63,0x6f,0x6e,0x73
.db 0x63,0x69,0x65,0x6e,0x63,0x65,0x20,0x6f
.db 0x75,0x72,0x20,0x6f,0x6e,0x6c,0x79,0x20
.db 0x73,0x75,0x72,0x65,0x20,0x72,0x65,0x77
.db 0x61,0x72,0x64,0x2c,0x20,0x77,0x69,0x74
.db 0x68,0x20,0x68,0x69,0x73,0x74,0x6f,0x72
.db 0x79,0x20,0x74,0x68,0x65,0x20,0x66,0x69
.db 0x6e,0x61,0x6c,0x20,0x6a,0x75,0x64,0x67
.db 0x65,0x20,0x6f,0x66,0x20,0x6f,0x75,0x72
.db 0x20,0x64,0x65,0x65,0x64,0x73,0x2c,0x20
.db 0x6c,0x65,0x74,0x20,0x75,0x73,0x20,0x67
.db 0x6f,0x20,0x66,0x6f,0x72,0x74,0x68,0x20
.db 0x74,0x6f,0x20,0x6c,0x65,0x61,0x64,0x20
.db 0x74,0x68,0x65,0x20,0x6c,0x61,0x6e,0x64
.db 0x20,0x77,0x65,0x20,0x6c,0x6f,0x76,0x65
.db 0x2c,0x20,0x61,0x73,0x6b,0x69,0x6e,0x67
.db 0x20,0x48,0x69,0x73,0x20,0x62,0x6c,0x65
.db 0x73,0x73,0x69,0x6e,0x67,0x20,0x61,0x6e
.db 0x64,0x20,0x48,0x69,0x73,0x20,0x68,0x65
.db 0x6c,0x70,0x2c,0x20,0x62,0x75,0x74,0x20
.db 0x6b,0x6e,0x6f,0x77,0x69,0x6e,0x67,0x20
.db 0x74,0x68,0x61,0x74,0x20,0x68,0x65,0x72
.db 0x65,0x20,0x6f,0x6e,0x20,0x65,0x61,0x72
.db 0x74,0x68,0x20,0x47,0x6f,0x64,0x27,0x73
.db 0x20,0x77,0x6f,0x72,0x6b,0x20,0x6d,0x75
.db 0x73,0x74,0x20,0x74,0x72,0x75,0x6c,0x79
.db 0x20,0x62,0x65,0x20,0x6f,0x75,0x72,0x20
.db 0x6f,0x77,0x6e,0x2e
```