

Devin Hardy

CS 340

Section 8.10.2 #8

SetColor PROC USES eax, forecolor:BYTE, backcolor:BYTE

 Movzx eax, backcolor

 Shl eax, 4

 Add al, forecolor

 Call SetTextColor

 Ret

SetColor ENDP

Section 8.11 #2

Chess Board

TITLE Add and Subtract, Version 2 (AddSub2.asm)

; This program adds and subtracts 32-bit integers
; and stores the sum in a variable.

INCLUDE Irvine32.inc

.data

val1 byte "I like pie", 0Ah, 0D, 0

.code

printRow1 PROC USES ecx

 push ebp ; stackframe!

 mov ebp, esp

 mov ecx, 4

 T1:

 mov eax, white

 call SetTextColor

 mov eax, 219

 call WriteChar

 call WriteChar

 call WriteChar

 call WriteChar

 mov eax, red

 call SetTextColor

 mov eax, 219

```

    call WriteChar
    call WriteChar
    call WriteChar
    call WriteChar
    loop T1 ; Loop for white red line
    mov eax, 0Ah ; character return
    call WriteChar
    mov eax, 32
    call WriteChar
    mov esp, ebp
    pop ebp
    ret

```

printRow1 EndP

printRow2 Proc USES ecx

```

    push ebp ; stackframe!
    mov ebp, esp
    mov ecx, 4

```

T1:

```

    mov eax, red
    call SetTextColor
    mov eax, 219
    call WriteChar
    call WriteChar
    call WriteChar
    call WriteChar
    mov eax, white
    call SetTextColor
    mov eax, 219
    call WriteChar
    call WriteChar
    call WriteChar
    call WriteChar
    loop T1 ; loop for red white
    mov eax, 0Ah ; character return
    call WriteChar
    mov eax, 32
    call WriteChar
    mov esp, ebp
    pop ebp
    ret

```

printRow2 EndP

main PROC

```

    mov eax, 0Ah
    call WriteChar
    mov eax, 32
    call WriteChar
    mov ecx, 4 ; for nested loop 1
T3:
    call printRow1
    call printRow1
    call printRow2
    call printRow2

```

```
        loop T3

        mov eax, 0Ah
        call WriteChar

        exit
main ENDP
END main
```