Lab 0

Friday, January 14, 2022 1:14 PM

Part I

write the microcode for R1 = 3R2 + 4M[100]

Cycle	X	Y	Z	RWE	Add/sub	Mult/div	Right/left	Shift	Logical function
1	0	3	3	1	0	X	X	0	0
2	0	1	1	1	X	1	X	0	0
3	2	X	0	1	X	X	0	1	0
4	2	0	2	1	1	X	X	1	1
5	1	2	0	1	1	X	X	1	1
6	0	X	1	1	X	X	0	1	0
7	0	1	1	1	1	X	X	0	1
8	0	3	1	1	X	0	X	0	0

```
.data
# This is the start of the original array.
Original: .word 200, 270, 250, 100
          .word 205, 230, 105, 235
          .word 190,  95,  90, 205
          .word  80, 205, 110, 215

# The next statement allocates room for the other array
# The array takes up 4* 16 - 64 bytes.
#
Second: .space 64
.align 2
.globl main
.text
main:

   la $v0, Original
   sll $v2, $v6, 2
   add $v2, $v2,
   lw $v3 , ($v2)
   s11 $v4, $v7, 2
   add $v4, $v3, $v4
   lw $v0, ($v4)

Exit: li $vo, 10
      syscall
```