HW2

Q1

1a.

Write all instructions. Try to complete the code without looking at the slide first.

The total number of executed instructions is 802.

1b.

The total number of instructions executed is 427.

Once we have the address of A[i] in a register, we can use its address as base register to access A[i+1].

Q2

Tips: write a nested loop, calculate the address of T[i][j].

All multiplications can be done with shift operation. Pay attention to the shift amounts.

Q3

Check your answers in RARS.

Q4

a.

sw x10,-16(x25)

b.

addi x14,x4,64

c.

and x23,x10,x5

d.

srai x30,x31,20

Practice encoding/decoding with more instructions, e.g., your lab code.