Quiz 3: VLIW

Due Oct 3 at 11:59pm **Points** 5 **Questions** 5 **Available** after Sep 29 at 12am **Time Limit** None **Allowed Attempts** 3

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	4 minutes	2.67 out of 5

Score for this attempt: **2.67** out of 5
Submitted Sep 29 at 4:12pm
This attempt took 4 minutes.

Question 1

1 / 1 pts

What is the ILP of the following code?

add $1, $2, $3

add $2, $1, $3

sub $4, $4, $5

add $6, $4, $5

addi $7, $6, 1

Correct!

- (•) 5/3
- ( ) 3/5
- ( ) 5/2
- ( ) 2/5

Question 2

0.33 / 1 pts

Match what dependence each code has.

You Answered — **a = 3; b = a;** — WAR

Correct Answer — RAW

You Answered — **a += 1;** — RAW

Correct Answer — WAR

Correct! — **a = 3; a = 4;** — WAW

Question 3

0 / 1 pts

Which of the following dependence cannot be resolved by renaming?

Correct Answer

- ( ) RAW

You Answered

- (•) WAR
- ( ) WAW

Question 4

1 / 1 pts

Consider a 2-issue VLIW processor we learned in class which can run 1 ALU and 1 memory op together. Assume load-use has to stall 1 cycle. How many cycle is needed to finish the following code with the best scheduling?

lw $1, 0($2)

sw $1, 0($3)

lw $2, 0($4)

add $4, $4, $4

addi $3, $2, 4

add $4, $4, $4

Correct!

4

Correct Answers

4 (with margin: 0)
0 (with margin: 0)
0 (with margin: 0)

Question 5

0.33 / 1 pts

What are the advantages of VLIW over Superscalar?

Correct!

- [x] Simpler hardware

Correct!

- [x] Potentially more scalable

You Answered

- [x] Faster compilation time

Correct Answer

- [ ] Lower-power hardware
- [ ] Better performance on stalls
- [ ] Better backward code compatibility
- [ ] Smaller code size

Quiz Score: **2.67** out of 5