

HW4.5. RISC-V U-types

Refer to the [Reference Card](#) to help you out.

What do the following instructions do?

lui

☐ (a) Lower 12 bits always set to 0

☐ (b) Lower 12 bits set to instruction-type immediate

☐ (c) Stands for "Load Unsigned Immediate"

☐ (d) Can be the first sub-instruction used in li

☐ (e) Upper 20 bits set to instruction-type immediate

☐ (f) Stands for "Load Upper Immediate"

☐ (g) Can be the second sub-instruction used in la

☐ (h) Upper 20 bits always set to 0

☐ (i) Is considered a PC-relative addressing instruction

☐ (j) Is considered a 0-relative (absolute) addressing instruction

Select all possible options that apply. ?

auipc

☐ (a) Can be the second sub-instruction used in la

☐ (b) Stands for "Add Upper Immediate to Program Counter"

☐ (c) Often used as the second instruction with jalr in order to call a function

☐ (d) Sets rd to the upper 20 bits of PC + imm and lower 12 bits to 0

☐ (e) Often used as the first instruction with jalr in order to call a function

☐ (f) Can be the first sub-instruction used in la

☐ (g) Sets rs1 to the upper 20 bits bits of (PC + imm)

☐ (h) Sets rd to PC + (imm<<12)

☐ (i) Is considered a PC-relative addressing instruction

☐ (j) Stands for "Add Unsigned Immediate to Personal Computer"

☐ (k) Is considered a 0-relative (absolute) addressing instruction

Select all possible options that apply. ?

Save & Grade 20 attempts left

Save only

Additional attempts available with new variants ?

Homework 4

Assessment overview

Total points:

42/100

Score:

42%

Question

Value:

8

History:

Awarded points:

0/8

Report an error in this question

Previous question

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Attached files

No attached files

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