

Simulador SuperEscalar

Bruno Luiz, Gabriel Souza, Luiz Guimarães, Luiza Ávila

Next

A) Sem Instrução
A) Sem Instrução
S) Sem Instrução
L) Sem Instrução
B) Sem Instrução

[Next](#)

A)	[addi_S2,S1]
A)	Sem Instrução
S)	Sem Instrução
L)	Sem Instrução
B)	[bne_S2,S1]

[Next](#)

A) [addi_c,S1]
A) Sem Instrução
S) Sem Instrução
L) [lw_c,S10]
B) [bne_c,S1]

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[illegible]

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[illegible]

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[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]

[Next](#)

A	[add_S4,f,S6]
A	[addi_S3,c]
S	[sw_f,c]
L	[lw_c,S10]
B	[bne_c,S1]

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]

Next

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]

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Next

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]

Clock: 14
Memória Principal:
IR: 24

Janela:

Execução:

Executados:

Next

[bne_S2,S1]
[addi_S2,S1]
[sw_S5,S2]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]

[addi_f,S3]
[add_S4,f,S6]
[sw_f,c]
[addi_S3,c]
[addi_f,S3]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_f,S3]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_c,S1]
[addi_S3,c]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_f,S3]
[add_S4,f,S6]

A| [addi_S3,c]
A| [addi_c,S1]
S| [sw_f,c]
L| [lw_c,S10]
B| Sem Instrução

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]

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[illegible]

Clock: 16
Memória Principal:
IR: 27

Janela:

Execução:

Executados:

Next

[bne_S2,S1]
[addi_S2,S1]
[sw_S5,S2]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]

[add_S4,f,S6]
[addi_f,S3]
[add_S4,f,S6]
[sw_f,c]
[addi_f,S3]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_c,S1]
[addi_S3,c]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_f,S3]
[add_S4,f,S6]

A| [addi_f,S3]
A| [addi_S3,c]
S| [sw_f,c]
L| [lw_c,S10]
B| Sem Instrução

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]

Clock: 17
Memória Principal:
IR: 30

Janela:

Execução:

Executados:

Next

[bne_S2,S1]
[addi_S2,S1]
[sw_S5,S2]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]

[add_S4,f,S6]
[addi_f,S3]
[add_S4,f,S6]
[sw_f,c]
[addi_f,S3]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_c,S1]
[addi_S3,c]
[add_S4,f,S6]
[lw_c,S10]
[sw_f,c]
[addi_f,S3]
[add_S4,f,S6]

A| [add_S4,f,S6]
A| [addi_f,S3]
S| [sw_f,c]
L| [lw_c,S10]
B| Sem Instrução

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]

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[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
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[bne_S2,S1]
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[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
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[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]
[sw_S5,S2]

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Next

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S5,S3]
[lw_S2,S10]

[Next](#)

[addi _S2,S1]
[bne _S2,S1]
[addi _S3,S2]
[addi _S2,S1]
[lw _S2,S10]
[bne _S2,S1]
[sw _S5,S2]
[addi _S5,S3]
[addi _S3,S2]
[bne _S2,S1]
[lw _S2,S10]
[add _S4,S5,S6]
[addi _S2,S1]
[sw _S5,S2]
[bne _S2,S1]
[add _S4,S5,S6]
[addi _S3,S2]
[lw _S2,S10]
[bne _S2,S1]
[sw _S5,S2]
[add _S4,S5,S6]
[addi _S2,S1]
[bne _S2,S1]
[lw _S2,S10]
[addi _S3,S2]
[addi _S2,S1]
[sw _S5,S2]
[addi _S5,S3]
[addi _S3,S2]
[lw _S2,S10]
[sw _S5,S2]
[add _S4,S5,S6]
[addi _S5,S3]
[lw _S2,S10]
[add _S4,S5,S6]
[addi _S5,S3]
[sw _S5,S2]

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[addi _S2,S1]
[bne _S2,S1]
[addi _S3,S2]
[addi _S2,S1]
[lw _S2,S10]
[bne _S2,S1]
[sw _S5,S2]
[addi _S5,S3]
[addi _S3,S2]
[bne _S2,S1]
[lw _S2,S10]
[add _S4,S5,S6]
[addi _S2,S1]
[sw _S5,S2]
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[add _S4,S5,S6]
[addi _S3,S2]
[lw _S2,S10]
[bne _S2,S1]
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[addi _S2,S1]
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[lw _S2,S10]
[addi _S3,S2]
[addi _S2,S1]
[sw _S5,S2]
[addi _S5,S3]
[addi _S3,S2]
[lw _S2,S10]
[sw _S5,S2]
[add _S4,S5,S6]
[addi _S5,S3]
[lw _S2,S10]
[add _S4,S5,S6]
[addi _S5,S3]
[sw _S5,S2]

[Next](#)

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
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[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
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[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
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[addi_S2,S1]
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[addi_S5,S3]
[addi_S3,S2]
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[sw_S5,S2]
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[lw_S2,S10]
[add_S4,S5,S6]
[addi_S5,S3]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[lw_S2,S10]

[Next](#)

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
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[bne_S2,S1]
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[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
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[bne_S2,S1]
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[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
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[addi_S3,S2]
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[lw_S2,S10]
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[addi_S5,S3]
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[add_S4,S5,S6]
[addi_S2,S1]
[lw_S2,S10]
[sw_S5,S2]

[Next](#)

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
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[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
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[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S5,S3]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S5,S3]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[lw_S2,S10]
[sw_S5,S2]
[addi_S3,S2]
[add_S4,S5,S6]

[Next](#)

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S5,S3]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S5,S3]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[lw_S2,S10]
[sw_S5,S2]
[addi_S3,S2]
[add_S4,S5,S6]

[Next](#)

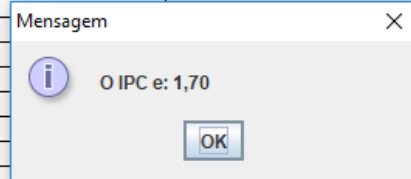
[addi _S2,S1]
[bne _S2,S1]
[addi _S3,S2]
[addi _S2,S1]
[lw _S2,S10]
[bne _S2,S1]
[sw _S5,S2]
[addi _S5,S3]
[addi _S3,S2]
[bne _S2,S1]
[lw _S2,S10]
[add _S4,S5,S6]
[addi _S2,S1]
[sw _S5,S2]
[bne _S2,S1]
[add _S4,S5,S6]
[addi _S3,S2]
[lw _S2,S10]
[bne _S2,S1]
[sw _S5,S2]
[add _S4,S5,S6]
[addi _S2,S1]
[bne _S2,S1]
[lw _S2,S10]
[addi _S3,S2]
[addi _S2,S1]
[sw _S5,S2]
[addi _S5,S3]
[addi _S3,S2]
[lw _S2,S10]
[sw _S5,S2]
[add _S4,S5,S6]
[addi _S5,S3]
[lw _S2,S10]
[add _S4,S5,S6]
[addi _S5,S3]
[sw _S5,S2]
[add _S4,S5,S6]
[addi _S2,S1]
[lw _S2,S10]
[sw _S5,S2]
[addi _S3,S2]
[add _S4,S5,S6]
[addi _S5,S3]

[Next](#)

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S5,S3]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S5,S3]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[lw_S2,S10]
[sw_S5,S2]
[addi_S3,S2]
[add_S4,S5,S6]
[addi_S5,S3]

Clock: 29
Memória Principal:
IR: 46

Janela:



[B] Sem Instrução

Executados:

Next

[bne_S2,S1]
[addi_S2,S1]
[sw_S5,S2]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[addi_S5,S3]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]
[bne_S2,S1]
[addi_S2,S1]
[addi_S3,S2]
[add_S4,S5,S6]
[lw_S2,S10]
[sw_S5,S2]

[addi_S2,S1]
[bne_S2,S1]
[addi_S3,S2]
[addi_S2,S1]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[bne_S2,S1]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S2,S1]
[sw_S5,S2]
[bne_S2,S1]
[add_S4,S5,S6]
[addi_S3,S2]
[lw_S2,S10]
[bne_S2,S1]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[bne_S2,S1]
[lw_S2,S10]
[addi_S3,S2]
[addi_S2,S1]
[sw_S5,S2]
[addi_S5,S3]
[addi_S3,S2]
[lw_S2,S10]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S5,S3]
[lw_S2,S10]
[add_S4,S5,S6]
[addi_S5,S3]
[sw_S5,S2]
[add_S4,S5,S6]
[addi_S2,S1]
[lw_S2,S10]
[sw_S5,S2]
[addi_S3,S2]
[add_S4,S5,S6]
[addi_S5,S3]