

Using directory : ./test/t1

Compiling sources

RUNNING TEST FROM ./test/t1

reset state

Immediate mode ALU instruction 0

ALU_inputs 0, x, 0, x

ALU_inputs 0, 128, 0, 128

reset state

reset state

reset state

reset state

reset state

reset state

reset state

reset state

reset state

INSTRUCTION : 08000113

100Datawrite 128 in reg 2

Immediate mode ALU instruction 0

Immediate mode ALU instruction 8

ALU_inputs 128, -32, 8, 96

110Datawrite 96 in reg 2

INSTRUCTION : fe010113

Immediate mode ALU instruction 8

ALU_inputs 96, -32, 8, 64

Store Instruction

Store Instruction

ALU_inputs 96, -32, 18, 0

ALU_inputs 96, 0, 18, 0

dmem write 0 at addr 124

INSTRUCTION : 00112e23

Store Instruction

Store Instruction

INSTRUCTION : 00812c23

dmem write 0 at addr 120

Store Instruction

Immediate mode ALU instruction 0

ALU_inputs 96, 0, 0, 96

ALU_inputs 96, 32, 0, 128

INSTRUCTION : 02010413

140Datawrite 128 in reg 8

Immediate mode ALU instruction 0

Immediate mode ALU instruction 0

ALU_inputs 0, 3, 0, 3

150Datawrite 3 in reg 15

INSTRUCTION : 00300793

Immediate mode ALU instruction 0

Store Instruction

ALU_inputs 128, 3, 26, 0

Store Instruction

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dmem write      3 at addr    108
INSTRUCTION : fef42623
Store Instruction
JAL
JAL
ALU_inputs      0,      3, 0,      3
JAL
ALU_inputs      0,     32, 0,     32
JAL
INSTRUCTION : 0100006f
JAL
JAL
Load instruction
ALU_inputs      0,     48, 0,     48
ALU_inputs     128,     48, 0,    176
ALU_inputs     128,      3, 10,      0
INSTRUCTION : fec42703
          180Datawrite      3 in reg 14
Load instruction
Immediate mode ALU instruction 0
ALU_inputs      0,      3, 0,      3
ALU_inputs      0,      1, 0,      1
          190Datawrite      1 in reg 15
INSTRUCTION : 00100793
Immediate mode ALU instruction 0
Conditional Branch 0,      1, 1
Branch instruction
ALU_inputs      1,      1, 28,      0
Conditional Branch 0,      0, 0
Branch instruction
Conditional Branch 1,      0, 0
ALU_inputs      1,      3, 18,      1
Conditional Branch 0,      1, 1
INSTRUCTION : fee7c6e3
Branch instruction
Conditional Branch 0,      1, 1
Load instruction
ALU_inputs     128,      3, 18,      0
ALU_inputs     128,      3, 10,      0
          210Datawrite      3 in reg 10
INSTRUCTION : fec42503
Load instruction
JAL
JAL
ALU_inputs      0,      3, 0,      3
JAL
ALU_inputs      0,     40, 0,     40
JAL
INSTRUCTION : 040000ef
          220Datawrite     40 in reg 1
JAL

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JAL

Immediate mode ALU instruction 8

ALU_inputs 0, 104, 0, 104

ALU_inputs 96, -32, 0, 64

ALU_inputs 96, 3, 8, 99

ALU_inputs 96, -32, 8, 64

230Datawrite 64 in reg 2

INSTRUCTION : fe010113

Immediate mode ALU instruction 8

ALU_inputs 64, -32, 8, 32

Store Instruction

Store Instruction

ALU_inputs 64, -32, 18, 0

ALU_inputs 64, 128, 18, 1

dmem write 128 at addr 92

INSTRUCTION : 00812e23

Store Instruction

Immediate mode ALU instruction 0

ALU_inputs 64, 128, 0, 192

ALU_inputs 64, 32, 0, 96

250Datawrite 96 in reg 8

INSTRUCTION : 02010413

Immediate mode ALU instruction 0

Store Instruction

ALU_inputs 96, 32, 26, 0

Store Instruction

ALU_inputs 96, 3, 26, 0

dmem write 3 at addr 76

INSTRUCTION : fea42623

Store Instruction

Load instruction

ALU_inputs 96, 3, 10, 0

270Datawrite 3 in reg 15

INSTRUCTION : fec42783

Load instruction

Immediate mode ALU instruction 8

ALU_inputs 3, 3, 8, 6

ALU_inputs 3, -1, 8, 2

INSTRUCTION : fff78793

280Datawrite 2 in reg 15

Immediate mode ALU instruction 8

Immediate mode ALU instruction 0

ALU_inputs 2, -1, 8, 1

ALU_inputs 2, 0, 0, 2

290Datawrite 2 in reg 10

INSTRUCTION : 00078513

Immediate mode ALU instruction 0

Load instruction

ALU_inputs 64, 0, 2, 0

ALU_inputs 64, 2, 2, 0

INSTRUCTION : 01c12403

300Datawrite 128 in reg 8

Load instruction

Immediate mode ALU instruction 0

ALU_inputs 64, 2, 0, 66

ALU_inputs 64, 32, 0, 96

310Datawrite 96 in reg 2

INSTRUCTION : 02010113

Immediate mode ALU instruction 0

ALU_inputs 96, 32, 0, 128

JALR

JALR

ALU_inputs 40, 32, 16, 72

JALR

ALU_inputs 40, 32, 0, 72

INSTRUCTION : 00008067

JALR

JALR

Store Instruction

ALU_inputs 128, 32, 0, 160

ALU_inputs 128, 2, 26, 0

INSTRUCTION : fea42623

dmem write 2 at addr 108

Store Instruction

Load instruction

ALU_inputs 128, 2, 10, 0

INSTRUCTION : fec42703

340Datawrite 2 in reg 14

Load instruction

Immediate mode ALU instruction 0

ALU_inputs 0, 2, 0, 2

ALU_inputs 0, 1, 0, 1

350Datawrite 1 in reg 15

INSTRUCTION : 00100793

Immediate mode ALU instruction 0

Conditional Branch 0, 1, 1

Branch instruction

ALU_inputs 1, 1, 28, 0

Conditional Branch 0, 0, 0

Conditional Branch 1, 0, 0

ALU_inputs 1, 2, 18, 1

Conditional Branch 0, 1, 1

INSTRUCTION : fee7c6e3

Branch instruction

Conditional Branch 0, 1, 1

Load instruction

ALU_inputs 128, 2, 18, 0

ALU_inputs 128, 2, 10, 0

370Datawrite 2 in reg 10

INSTRUCTION : fec42503

Load instruction

JAL

```

JAL
ALU_inputs    0,    2, 0,    2
JAL
ALU_inputs    0,    40, 0,    40
JAL
INSTRUCTION : 040000ef
          380Datawrite    40 in reg 1
JAL
JAL
Immediate mode ALU instruction 8
ALU_inputs    0,    104, 0,    104
ALU_inputs    96,    -32, 0,    64
ALU_inputs    96,    2, 8,    98
ALU_inputs    96,    -32, 8,    64
          390Datawrite    64 in reg 2
INSTRUCTION : fe010113
Immediate mode ALU instruction 8
ALU_inputs    64,    -32, 8,    32
Store Instruction
Store Instruction
ALU_inputs    64,    -32, 18,    0
ALU_inputs    64,    128, 18,    1
dmem write    128 at addr    92
INSTRUCTION : 00812e23
Store Instruction
Immediate mode ALU instruction 0
ALU_inputs    64,    128, 0,    192
ALU_inputs    64,    32, 0,    96
          410Datawrite    96 in reg 8
INSTRUCTION : 02010413
Immediate mode ALU instruction 0
Store Instruction
ALU_inputs    96,    32, 26,    0
Store Instruction
ALU_inputs    96,    2, 26,    0
dmem write    2 at addr    76
INSTRUCTION : fea42623
Store Instruction
Load instruction
ALU_inputs    96,    2, 10,    0
          430Datawrite    2 in reg 15
INSTRUCTION : fec42783
Load instruction
Immediate mode ALU instruction 8
ALU_inputs    2,    2, 8,    4
ALU_inputs    2,    -1, 8,    1
INSTRUCTION : fff78793
          440Datawrite    1 in reg 15
Immediate mode ALU instruction 8
Immediate mode ALU instruction 0
ALU_inputs    1,    -1, 8,    0

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ALU_inputs      1,      0, 0,      1
      450Datawrite      1 in reg 10
INSTRUCTION : 00078513
Immediate mode ALU instruction 0
Load instruction
ALU_inputs      64,      0, 2,      0
ALU_inputs      64,      1, 2,      0
INSTRUCTION : 01c12403
      460Datawrite      128 in reg 8
Load instruction
Immediate mode ALU instruction 0
ALU_inputs      64,      1, 0,      65
ALU_inputs      64,      32, 0,      96
      470Datawrite      96 in reg 2
INSTRUCTION : 02010113
Immediate mode ALU instruction 0
ALU_inputs      96,      32, 0,      128
JALR
JALR
ALU_inputs      40,      32, 16,      72
JALR
ALU_inputs      40,      32, 0,      72
INSTRUCTION : 00008067
JALR
JALR
Store Instruction
ALU_inputs      128,      32, 0,      160
ALU_inputs      128,      1, 26,      0
INSTRUCTION : fea42623
dmem write      1 at addr      108
Store Instruction
Load instruction
ALU_inputs      128,      1, 10,      0
INSTRUCTION : fec42703
      500Datawrite      1 in reg 14
Load instruction
Immediate mode ALU instruction 0
ALU_inputs      0,      1, 0,      1
      510Datawrite      1 in reg 15
INSTRUCTION : 00100793
Immediate mode ALU instruction 0
Conditional Branch 0,      1, 1
Branch instruction
ALU_inputs      1,      1, 28,      0
Conditional Branch 0,      0, 0
Conditional Branch 1,      0, 0
ALU_inputs      1,      1, 18,      0
INSTRUCTION : fee7c6e3
Branch instruction
Conditional Branch 1,      0, 0
Load instruction

```

ALU_inputs 128, 1, 18, 0
ALU_inputs 128, 1, 10, 0
530Datawrite 1 in reg 14

INSTRUCTION : fec42703

Load instruction

Immediate mode ALU instruction 0

ALU_inputs 0, 1, 0, 1

INSTRUCTION : 00100793

540Datawrite 1 in reg 15

Immediate mode ALU instruction 0

Conditional Branch 0, 1, 0

Branch instruction

ALU_inputs 1, 1, 16, 2

Conditional Branch 0, 2, 0

Conditional Branch 1, 2, 1

ALU_inputs 1, 1, 18, 0

Conditional Branch 1, 0, 1

INSTRUCTION : 00f70663

Branch instruction

Conditional Branch 1, 0, 1

Immediate mode ALU instruction 0

ALU_inputs 0, 1, 18, 1

ALU_inputs 0, 314, 0, 314

INSTRUCTION : 13a00793

560Datawrite 314 in reg 15

Immediate mode ALU instruction 0

Immediate mode ALU instruction 0

ALU_inputs 314, 0, 0, 314

570Datawrite 314 in reg 10

INSTRUCTION : 00078513

Immediate mode ALU instruction 0

Load instruction

ALU_inputs 96, 0, 2, 0

ALU_inputs 96, 314, 2, 1

INSTRUCTION : 01c12083

580Datawrite 0 in reg 1

Load instruction

Load instruction

590Datawrite 0 in reg 8

INSTRUCTION : 01812403

Load instruction

Immediate mode ALU instruction 0

ALU_inputs 96, 314, 0, 410

ALU_inputs 96, 32, 0, 128

INSTRUCTION : 02010113

600Datawrite 128 in reg 2

Immediate mode ALU instruction 0

JALR

JALR

ALU_inputs 128, 32, 0, 160

JALR

ALU_inputs	0,	32, 16,	32
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JALR

ALU_inputs	0,	32, 18,	1
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JALR

INSTRUCTION : 08c00067

JALR

JALR

ALU_inputs	0,	314, 0,	314
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Store Instruction

Store Instruction

ALU_inputs	0,	0, 18,	0
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dmem write 0 at addr 0

INSTRUCTION : 00002023

Store Instruction

Store Instruction

INSTRUCTION : 00102223

dmem write 0 at addr 4

Store Instruction

Store Instruction

Store Instruction

ALU_inputs	0,	128, 18,	1
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dmem write 128 at addr 8

INSTRUCTION : 00202423

Store Instruction

Store Instruction

Store Instruction

ALU_inputs	0,	0, 18,	0
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INSTRUCTION : 00302623

dmem write 0 at addr 12

Store Instruction

Store Instruction

dmem write 0 at addr 16

INSTRUCTION : 00402823

Store Instruction

Store Instruction

INSTRUCTION : 00502a23

dmem write 0 at addr 20

Store Instruction

Store Instruction

dmem write 0 at addr 24

INSTRUCTION : 00602c23

Store Instruction

Store Instruction

INSTRUCTION : 00702e23

dmem write 0 at addr 28

Store Instruction

Store Instruction

dmem write 0 at addr 32

INSTRUCTION : 02802023

Store Instruction

Store Instruction

INSTRUCTION : 02902223
dmem write 0 at addr 36
Store Instruction
Store Instruction
Store Instruction
ALU_inputs 0, 314, 18, 1
dmem write 314 at addr 40
INSTRUCTION : 02a02423
Store Instruction
Store Instruction
Store Instruction
ALU_inputs 0, 0, 18, 0
INSTRUCTION : 02b02623
dmem write 0 at addr 44
Store Instruction
Store Instruction
dmem write 0 at addr 48
INSTRUCTION : 02c02823
Store Instruction
Store Instruction
INSTRUCTION : 02d02a23
dmem write 0 at addr 52
Store Instruction
Store Instruction
Store Instruction
ALU_inputs 0, 1, 18, 1
dmem write 1 at addr 56
INSTRUCTION : 02e02c23
Store Instruction
Store Instruction
Store Instruction
ALU_inputs 0, 314, 18, 1
INSTRUCTION : 02f02e23
dmem write 314 at addr 60
Store Instruction
Store Instruction
Store Instruction
ALU_inputs 0, 0, 18, 0
dmem write 0 at addr 64
INSTRUCTION : 05002023
Store Instruction
Store Instruction
INSTRUCTION : 05102223
dmem write 0 at addr 68
Store Instruction
Store Instruction
dmem write 0 at addr 72
INSTRUCTION : 05202423
Store Instruction
Store Instruction
INSTRUCTION : 05302623

dmem write	0 at addr	76
Store Instruction		
Store Instruction		
dmem write	0 at addr	80
INSTRUCTION : 05402823		
Store Instruction		
Store Instruction		
INSTRUCTION : 05502a23		
dmem write	0 at addr	84
Store Instruction		
Store Instruction		
dmem write	0 at addr	88
INSTRUCTION : 05602c23		
Store Instruction		
Store Instruction		
INSTRUCTION : 05702e23		
dmem write	0 at addr	92
Store Instruction		
Store Instruction		
dmem write	0 at addr	96
INSTRUCTION : 07802023		
Store Instruction		
Store Instruction		
INSTRUCTION : 07902223		
dmem write	0 at addr	100
Store Instruction		
Store Instruction		
dmem write	0 at addr	104
INSTRUCTION : 07a02423		
Store Instruction		
Store Instruction		
INSTRUCTION : 07b02623		
dmem write	0 at addr	108
Store Instruction		
Store Instruction		
dmem write	0 at addr	112
INSTRUCTION : 07c02823		
Store Instruction		
Store Instruction		
INSTRUCTION : 07d02a23		
dmem write	0 at addr	116
Store Instruction		
Store Instruction		
dmem write	0 at addr	120
INSTRUCTION : 07e02c23		
Store Instruction		
Store Instruction		
INSTRUCTION : 07f02e23		
dmem write	0 at addr	124
Store Instruction		
ALU_inputs	0, 0, 0,	0

Using directory : ./test/t2

Compiling sources

RUNNING TEST FROM ./test/t2

reset state

Non immediate mode ALU instruction 0

ALU_inputs 0, x, 16, x

Non immediate mode ALU instruction 0

ALU_inputs 0, 0, 16, 0

reset state

reset state

reset state

reset state

reset state

reset state

reset state

reset state

reset state

INSTRUCTION : 00000fb3

100Datawrite 0 in reg 31

Non immediate mode ALU instruction 0

LUI

ALU_inputs 0, 0, 20, 0

ALU_inputs 0, 81920, 0, 81920

110Datawrite 81920 in reg 1

INSTRUCTION : 000140b7

LUI

Immediate mode ALU instruction 0

ALU_inputs 0, 20, 0, 20

INSTRUCTION : 01400113

120Datawrite 20 in reg 2

Immediate mode ALU instruction 0

Conditional Branch 0, 20, 0

Branch instruction

ALU_inputs 20, 20, 16, 40

Conditional Branch 0, 40, 0

Branch instruction

Conditional Branch 1, 40, 1

ALU_inputs 20, 81920, 18, 1

Conditional Branch 0, 1, 0

INSTRUCTION : 02110663

Branch instruction

Conditional Branch 0, 1, 0

AUIPC

ALU_inputs 0, 81920, 0, 81920

ALU_inputs 0, 81920, 4, 81920

INSTRUCTION : 00004197

140Datawrite 81920 in reg 3

AUIPC

Conditional Branch 0, 81920, 0

Branch instruction

```

ALU_inputs    81920,    81920, 16,    163840
Conditional Branch 0,    163840, 0
Conditional Branch 1,    163840, 1
ALU_inputs    81920,    81920, 18,    0
Conditional Branch 1,    0, 1
INSTRUCTION : 02118263
Branch instruction
Conditional Branch 1,    0, 1
Immediate mode ALU instruction 0
ALU_inputs    0,    81920, 18,    1
ALU_inputs    0,    1, 0,    1
INSTRUCTION : 00100f93
            160Datawrite    1 in reg 31
Immediate mode ALU instruction 0
ALU_inputs    0,    81920, 0,    81920
Store Instruction
Store Instruction
ALU_inputs    0,    0, 18,    0
INSTRUCTION : 00002023
dmem write    0 at addr    0
Store Instruction
Store Instruction
Store Instruction
ALU_inputs    0,    81920, 18,    1
dmem write    81920 at addr    4
INSTRUCTION : 00102223
Store Instruction
Store Instruction
Store Instruction
ALU_inputs    0,    20, 18,    1
INSTRUCTION : 00202423
dmem write    20 at addr    8
Store Instruction
Store Instruction
Store Instruction
ALU_inputs    0,    81920, 18,    1
dmem write    81920 at addr    12
INSTRUCTION : 00302623
Store Instruction
Store Instruction
Store Instruction
ALU_inputs    0,    0, 18,    0
INSTRUCTION : 00402823
dmem write    0 at addr    16
Store Instruction
Store Instruction
dmem write    0 at addr    20
INSTRUCTION : 00502a23
Store Instruction
Store Instruction
INSTRUCTION : 00602c23

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dmem write	0 at addr	24
Store Instruction		
Store Instruction		
dmem write	0 at addr	28
INSTRUCTION : 00702e23		
Store Instruction		
Store Instruction		
INSTRUCTION : 02802023		
dmem write	0 at addr	32
Store Instruction		
Store Instruction		
dmem write	0 at addr	36
INSTRUCTION : 02902223		
Store Instruction		
Store Instruction		
INSTRUCTION : 02a02423		
dmem write	0 at addr	40
Store Instruction		
Store Instruction		
dmem write	0 at addr	44
INSTRUCTION : 02b02623		
Store Instruction		
Store Instruction		
INSTRUCTION : 02c02823		
dmem write	0 at addr	48
Store Instruction		
Store Instruction		
dmem write	0 at addr	52
INSTRUCTION : 02d02a23		
Store Instruction		
Store Instruction		
INSTRUCTION : 02e02c23		
dmem write	0 at addr	56
Store Instruction		
Store Instruction		
dmem write	0 at addr	60
INSTRUCTION : 02f02e23		
Store Instruction		
Store Instruction		
INSTRUCTION : 05002023		
dmem write	0 at addr	64
Store Instruction		
Store Instruction		
dmem write	0 at addr	68
INSTRUCTION : 05102223		
Store Instruction		
Store Instruction		
INSTRUCTION : 05202423		
dmem write	0 at addr	72
Store Instruction		
Store Instruction		

dmem write	0 at addr	76
INSTRUCTION : 05302623		
Store Instruction		
Store Instruction		
INSTRUCTION : 05402823		
dmem write	0 at addr	80
Store Instruction		
Store Instruction		
dmem write	0 at addr	84
INSTRUCTION : 05502a23		
Store Instruction		
Store Instruction		
INSTRUCTION : 05602c23		
dmem write	0 at addr	88
Store Instruction		
Store Instruction		
dmem write	0 at addr	92
INSTRUCTION : 05702e23		
Store Instruction		
Store Instruction		
INSTRUCTION : 07802023		
dmem write	0 at addr	96
Store Instruction		
Store Instruction		
dmem write	0 at addr	100
INSTRUCTION : 07902223		
Store Instruction		
Store Instruction		
INSTRUCTION : 07a02423		
dmem write	0 at addr	104
Store Instruction		
Store Instruction		
dmem write	0 at addr	108
INSTRUCTION : 07b02623		
Store Instruction		
Store Instruction		
INSTRUCTION : 07c02823		
dmem write	0 at addr	112
Store Instruction		
Store Instruction		
dmem write	0 at addr	116
INSTRUCTION : 07d02a23		
Store Instruction		
Store Instruction		
INSTRUCTION : 07e02c23		
dmem write	0 at addr	120
Store Instruction		
Store Instruction		
Store Instruction		
ALU_inputs	0, 1, 18,	1
dmem write	1 at addr	124

```
Store Instruction
ALU_inputs      0,      1, 0,      1
FAIL: Expected Reg[    3] = 00004010 vs. Got Reg[    3] = 00014000
FAIL: Expected Reg[    4] = 0000001c vs. Got Reg[    4] = 00000000
FAIL: Expected Reg[    5] = 0000001c vs. Got Reg[    5] = 00000000
FAIL: Expected Reg[    6] = 0000002c vs. Got Reg[    6] = 00000000
FAIL: Expected Reg[    7] = 0000002c vs. Got Reg[    7] = 00000000
FAIL: Expected Reg[   31] = 00000000 vs. Got Reg[   31] = 00000001
>>>>>>>>>>>TESTCASE ENDED
FAILED.        6 registers do not match.
```

```
Compiling sources
WARNING: imem.v:9: $readmemh(/test/t3/idata.mem): Not enough words in the file for the requested range [0:4095].
RUNNING TEST FROM ./test/t3
```

```

reset state
Immediate mode ALU instruction 0
ALU_inputs      0,      x, 0,      x
ALU_inputs      0,      1, 0,      1
reset state
reset state
reset state
reset state
reset state
reset state
reset state
reset state
reset state
INSTRUCTION : 00100f93
          100Datawrite      1 in reg 31
Immediate mode ALU instruction 0
Immediate mode ALU instruction 0
ALU_inputs      0,      4, 0,      4
          110Datawrite      4 in reg 2
INSTRUCTION : 00400113
Immediate mode ALU instruction 0
Immediate mode ALU instruction 4
ALU_inputs      4,      3, 4,      7
INSTRUCTION : 00314093
          120Datawrite      7 in reg 1
Immediate mode ALU instruction 4
Conditional Branch 0,      7, 0
Branch instruction
ALU_inputs      7,      3, 16,     10
Conditional Branch 0,      10, 0
Branch instruction
ALU_inputs      7,      4, 18,     0
Conditional Branch 0,      0, 0
INSTRUCTION : 02208263

```

Branch instruction

Conditional Branch 0, 0, 0

Conditional Branch 0, 0, 0

Branch instruction

ALU_inputs 4, 4, 18, 0

Conditional Branch 0, 0, 0

Branch instruction

ALU_inputs 4, 7, 18, 1

Conditional Branch 1, 1, 0

Conditional Branch 0, 1, 1

INSTRUCTION : 00114863

Branch instruction

Conditional Branch 0, 1, 1

Non immediate mode ALU instruction 0

ALU_inputs 0, 7, 18, 1

Non immediate mode ALU instruction 0

ALU_inputs 0, 0, 18, 0

ALU_inputs 0, 0, 16, 0

150Datawrite 0 in reg 3

INSTRUCTION : 000001b3

Non immediate mode ALU instruction 0

Non immediate mode ALU instruction 0

ALU_inputs 4, 0, 16, 4

Non immediate mode ALU instruction 0

ALU_inputs 4, 7, 16, 11

INSTRUCTION : 00110033

Non immediate mode ALU instruction 0

Conditional Branch 0, 11, 1

Branch instruction

ALU_inputs 0, 7, 17, 0

Conditional Branch 0, 0, 1

Branch instruction

ALU_inputs 0, 0, 17, 0

Conditional Branch 1, 0, 0

ALU_inputs 0, 0, 18, 0

INSTRUCTION : 00301463

Branch instruction

Conditional Branch 1, 0, 0

Conditional Branch 1, 0, 1

Branch instruction

INSTRUCTION : 0001d463

Branch instruction

Conditional Branch 1, 0, 1

ALU_inputs 0, 0, 0, 0

Store Instruction

ALU_inputs 0, 0, 18, 0

dmem write 0 at addr 0

INSTRUCTION : 00002023

Store Instruction

Store Instruction

Store Instruction

ALU_inputs	0,	7, 18,	1
INSTRUCTION : 00102223			
dmem write	7 at addr	4	
Store Instruction			
Store Instruction			
Store Instruction			
ALU_inputs	0,	4, 18,	1
dmem write	4 at addr	8	
INSTRUCTION : 00202423			
Store Instruction			
Store Instruction			
Store Instruction			
ALU_inputs	0,	0, 18,	0
INSTRUCTION : 00302623			
dmem write	0 at addr	12	
Store Instruction			
Store Instruction			
dmem write	0 at addr	16	
INSTRUCTION : 00402823			
Store Instruction			
Store Instruction			
INSTRUCTION : 00502a23			
dmem write	0 at addr	20	
Store Instruction			
Store Instruction			
dmem write	0 at addr	24	
INSTRUCTION : 00602c23			
Store Instruction			
Store Instruction			
INSTRUCTION : 00702e23			
dmem write	0 at addr	28	
Store Instruction			
Store Instruction			
dmem write	0 at addr	32	
INSTRUCTION : 02802023			
Store Instruction			
Store Instruction			
INSTRUCTION : 02902223			
dmem write	0 at addr	36	
Store Instruction			
Store Instruction			
dmem write	0 at addr	40	
INSTRUCTION : 02a02423			
Store Instruction			
Store Instruction			
INSTRUCTION : 02b02623			
dmem write	0 at addr	44	
Store Instruction			
Store Instruction			
dmem write	0 at addr	48	
INSTRUCTION : 02c02823			

Store Instruction
Store Instruction
INSTRUCTION : 02d02a23
dmem write 0 at addr 52
Store Instruction
Store Instruction
dmem write 0 at addr 56
INSTRUCTION : 02e02c23
Store Instruction
Store Instruction
INSTRUCTION : 02f02e23
dmem write 0 at addr 60
Store Instruction
Store Instruction
dmem write 0 at addr 64
INSTRUCTION : 05002023
Store Instruction
Store Instruction
INSTRUCTION : 05102223
dmem write 0 at addr 68
Store Instruction
Store Instruction
dmem write 0 at addr 72
INSTRUCTION : 05202423
Store Instruction
Store Instruction
INSTRUCTION : 05302623
dmem write 0 at addr 76
Store Instruction
Store Instruction
dmem write 0 at addr 80
INSTRUCTION : 05402823
Store Instruction
Store Instruction
INSTRUCTION : 05502a23
dmem write 0 at addr 84
Store Instruction
Store Instruction
dmem write 0 at addr 88
INSTRUCTION : 05602c23
Store Instruction
Store Instruction
INSTRUCTION : 05702e23
dmem write 0 at addr 92
Store Instruction
Store Instruction
dmem write 0 at addr 96
INSTRUCTION : 07802023
Store Instruction
Store Instruction
INSTRUCTION : 07902223

```

dmem write      0 at addr    100
Store Instruction
Store Instruction
dmem write      0 at addr    104
INSTRUCTION : 07a02423
Store Instruction
Store Instruction
INSTRUCTION : 07b02623
dmem write      0 at addr    108
Store Instruction
Store Instruction
dmem write      0 at addr    112
INSTRUCTION : 07c02823
Store Instruction
Store Instruction
INSTRUCTION : 07d02a23
dmem write      0 at addr    116
Store Instruction
Store Instruction
dmem write      0 at addr    120
INSTRUCTION : 07e02c23
Store Instruction
Store Instruction
Store Instruction
ALU_inputs      0,      1, 18,      1
INSTRUCTION : 07f02e23
dmem write      1 at addr    124
Store Instruction
ALU_inputs      0,      1, 0,      1
Failed 1 cases

```

You should see a PASS message and all tests pass.
 If any test reports as a FAIL, fix it before submitting.
 Once all tests pass, commit the changes into your code,
 and push the commit back to the server for evaluation.