------------------------------------------------

Clock Cycle 0

IF\_ID Write:

instruction= a1020000

IF\_ID Read:

instruction= 00000000

ID\_EX Write: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

ID\_EX Read: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

EX\_MEM Write: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

EX\_MEM Read: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

MEM\_WB Write: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

MEM\_WB Read: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 103

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 10a

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

------------------------------------------------

Clock Cycle 1

IF\_ID Write:

instruction= 810afffc

IF\_ID Read:

instruction= a1020000

ID\_EX Write: (Sb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=0, MemWrite=1, RegWrite=0, MemToReg=0,

ReadReg1Value=108, ReadReg2Value=102, rt=2, rd=0, funct=0, SEOffset=0, SWValue=102

ID\_EX Read: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

EX\_MEM Write: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

EX\_MEM Read: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

MEM\_WB Write: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

MEM\_WB Read: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 103

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 10a

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

------------------------------------------------

Clock Cycle 2

IF\_ID Write:

instruction= 00831820

IF\_ID Read:

instruction= 810afffc

ID\_EX Write: (Lb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

ReadReg1Value=108, ReadReg2Value=10a, rt=10, rd=31, funct=3c, SEOffset=fffffffc, SWValue=10a

ID\_EX Read: (Sb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=0, MemWrite=1, RegWrite=0, MemToReg=0,

ReadReg1Value=108, ReadReg2Value=102, rt=2, rd=0, funct=0, SEOffset=0, SWValue=102

EX\_MEM Write: (Sb)

MemRead=0, MemWrite=1, RegWrite=0, MemToReg=0,

AluResult=108, SWValue=102, WriteRegNum=2

EX\_MEM Read: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

MEM\_WB Write: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

MEM\_WB Read: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 103

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 10a

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

------------------------------------------------

Clock Cycle 3

IF\_ID Write:

instruction= 01263820

IF\_ID Read:

instruction= 00831820

ID\_EX Write: (Add)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=104, ReadReg2Value=103, rt=3, rd=3, funct=20, SEOffset=1820, SWValue=103

ID\_EX Read: (Lb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

ReadReg1Value=108, ReadReg2Value=10a, rt=10, rd=31, funct=3c, SEOffset=fffffffc, SWValue=10a

EX\_MEM Write: (Lb)

MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

AluResult=104, SWValue=10a, WriteRegNum=10

EX\_MEM Read: (Sb)

MemRead=0, MemWrite=1, RegWrite=0, MemToReg=0,

AluResult=108, SWValue=102, WriteRegNum=2

MEM\_WB Write: (Sb)

RegWrite=0, MemToReg=0,

AluResult=108, RegWriteNum=2, LWDataValue=0

MEM\_WB Read: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 103

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 10a

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

------------------------------------------------

Clock Cycle 4

IF\_ID Write:

instruction= 01224820

IF\_ID Read:

instruction= 01263820

ID\_EX Write: (Add)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=109, ReadReg2Value=106, rt=6, rd=7, funct=20, SEOffset=3820, SWValue=106

ID\_EX Read: (Add)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=104, ReadReg2Value=103, rt=3, rd=3, funct=20, SEOffset=1820, SWValue=103

EX\_MEM Write: (Add)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=207, SWValue=103, WriteRegNum=3

EX\_MEM Read: (Lb)

MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

AluResult=104, SWValue=10a, WriteRegNum=10

MEM\_WB Write: (Lb)

RegWrite=1, MemToReg=1,

AluResult=104, RegWriteNum=10, LWDataValue=4

MEM\_WB Read: (Sb)

RegWrite=0, MemToReg=0,

AluResult=108, RegWriteNum=2, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 103

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 10a

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

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Clock Cycle 5

IF\_ID Write:

instruction= 81180000

IF\_ID Read:

instruction= 01224820

ID\_EX Write: (Add)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=109, ReadReg2Value=102, rt=2, rd=9, funct=20, SEOffset=4820, SWValue=102

ID\_EX Read: (Add)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=109, ReadReg2Value=106, rt=6, rd=7, funct=20, SEOffset=3820, SWValue=106

EX\_MEM Write: (Add)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=20f, SWValue=106, WriteRegNum=7

EX\_MEM Read: (Add)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=207, SWValue=103, WriteRegNum=3

MEM\_WB Write: (Add)

RegWrite=1, MemToReg=0,

AluResult=207, RegWriteNum=3, LWDataValue=0

MEM\_WB Read: (Lb)

RegWrite=1, MemToReg=1,

AluResult=104, RegWriteNum=10, LWDataValue=4

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 103

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

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Clock Cycle 6

IF\_ID Write:

instruction= 81510010

IF\_ID Read:

instruction= 81180000

ID\_EX Write: (Lb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

ReadReg1Value=108, ReadReg2Value=118, rt=24, rd=0, funct=0, SEOffset=0, SWValue=118

ID\_EX Read: (Add)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=109, ReadReg2Value=102, rt=2, rd=9, funct=20, SEOffset=4820, SWValue=102

EX\_MEM Write: (Add)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=20b, SWValue=102, WriteRegNum=9

EX\_MEM Read: (Add)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=20f, SWValue=106, WriteRegNum=7

MEM\_WB Write: (Add)

RegWrite=1, MemToReg=0,

AluResult=20f, RegWriteNum=7, LWDataValue=0

MEM\_WB Read: (Add)

RegWrite=1, MemToReg=0,

AluResult=207, RegWriteNum=3, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 207

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 107

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

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Clock Cycle 7

IF\_ID Write:

instruction= 00624022

IF\_ID Read:

instruction= 81510010

ID\_EX Write: (Lb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

ReadReg1Value=4, ReadReg2Value=111, rt=17, rd=0, funct=10, SEOffset=10, SWValue=111

ID\_EX Read: (Lb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

ReadReg1Value=108, ReadReg2Value=118, rt=24, rd=0, funct=0, SEOffset=0, SWValue=118

EX\_MEM Write: (Lb)

MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

AluResult=108, SWValue=118, WriteRegNum=24

EX\_MEM Read: (Add)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=20b, SWValue=102, WriteRegNum=9

MEM\_WB Write: (Add)

RegWrite=1, MemToReg=0,

AluResult=20b, RegWriteNum=9, LWDataValue=0

MEM\_WB Read: (Add)

RegWrite=1, MemToReg=0,

AluResult=20f, RegWriteNum=7, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 207

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 20f

Value at Register 08: 108

Value at Register 09: 109

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

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Clock Cycle 8

IF\_ID Write:

instruction= 00000000

IF\_ID Read:

instruction= 00624022

ID\_EX Write: (Sub)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=207, ReadReg2Value=102, rt=2, rd=8, funct=22, SEOffset=4022, SWValue=102

ID\_EX Read: (Lb)

RegDst=0, ALUOp=0, ALUSrc=1, MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

ReadReg1Value=4, ReadReg2Value=111, rt=17, rd=0, funct=10, SEOffset=10, SWValue=111

EX\_MEM Write: (Lb)

MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

AluResult=14, SWValue=111, WriteRegNum=17

EX\_MEM Read: (Lb)

MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

AluResult=108, SWValue=118, WriteRegNum=24

MEM\_WB Write: (Lb)

RegWrite=1, MemToReg=1,

AluResult=108, RegWriteNum=24, LWDataValue=102

MEM\_WB Read: (Add)

RegWrite=1, MemToReg=0,

AluResult=20b, RegWriteNum=9, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 207

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 20f

Value at Register 08: 108

Value at Register 09: 20b

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 118

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

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Clock Cycle 9

IF\_ID Write:

instruction= 00000000

IF\_ID Read:

instruction= 00000000

ID\_EX Write: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

ID\_EX Read: (Sub)

RegDst=1, ALUOp=10, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

ReadReg1Value=207, ReadReg2Value=102, rt=2, rd=8, funct=22, SEOffset=4022, SWValue=102

EX\_MEM Write: (Sub)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=105, SWValue=102, WriteRegNum=8

EX\_MEM Read: (Lb)

MemRead=1, MemWrite=0, RegWrite=1, MemToReg=1,

AluResult=14, SWValue=111, WriteRegNum=17

MEM\_WB Write: (Lb)

RegWrite=1, MemToReg=1,

AluResult=14, RegWriteNum=17, LWDataValue=14

MEM\_WB Read: (Lb)

RegWrite=1, MemToReg=1,

AluResult=108, RegWriteNum=24, LWDataValue=102

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 207

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 20f

Value at Register 08: 108

Value at Register 09: 20b

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 111

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 102

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

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Clock Cycle 10

IF\_ID Write:

instruction= 00000000

IF\_ID Read:

instruction= 00000000

ID\_EX Write: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

ID\_EX Read: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

EX\_MEM Write: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

EX\_MEM Read: (Sub)

MemRead=0, MemWrite=0, RegWrite=1, MemToReg=0,

AluResult=105, SWValue=102, WriteRegNum=8

MEM\_WB Write: (Sub)

RegWrite=1, MemToReg=0,

AluResult=105, RegWriteNum=8, LWDataValue=0

MEM\_WB Read: (Lb)

RegWrite=1, MemToReg=1,

AluResult=14, RegWriteNum=17, LWDataValue=14

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 207

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 20f

Value at Register 08: 108

Value at Register 09: 20b

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 14

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 102

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f

------------------------------------------------

Clock Cycle 11

IF\_ID Write:

instruction= 00000000

IF\_ID Read:

instruction= 00000000

ID\_EX Write: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

ID\_EX Read: (NOP)

RegDst=0, ALUOp=0, ALUSrc=0, MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

ReadReg1Value=0, ReadReg2Value=0, rt=0, rd=0, funct=0, SEOffset=0, SWValue=0

EX\_MEM Write: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

EX\_MEM Read: (NOP)

MemRead=0, MemWrite=0, RegWrite=0, MemToReg=0,

AluResult=0, SWValue=0, WriteRegNum=0

MEM\_WB Write: (NOP)

RegWrite=0, MemToReg=0,

AluResult=0, RegWriteNum=0, LWDataValue=0

MEM\_WB Read: (Sub)

RegWrite=1, MemToReg=0,

AluResult=105, RegWriteNum=8, LWDataValue=0

Register Values:

Value at Register 00: 0

Value at Register 01: 101

Value at Register 02: 102

Value at Register 03: 207

Value at Register 04: 104

Value at Register 05: 105

Value at Register 06: 106

Value at Register 07: 20f

Value at Register 08: 105

Value at Register 09: 20b

Value at Register 10: 4

Value at Register 11: 10b

Value at Register 12: 10c

Value at Register 13: 10d

Value at Register 14: 10e

Value at Register 15: 10f

Value at Register 16: 110

Value at Register 17: 14

Value at Register 18: 112

Value at Register 19: 113

Value at Register 20: 114

Value at Register 21: 115

Value at Register 22: 116

Value at Register 23: 117

Value at Register 24: 102

Value at Register 25: 119

Value at Register 26: 11a

Value at Register 27: 11b

Value at Register 28: 11c

Value at Register 29: 11d

Value at Register 30: 11e

Value at Register 31: 11f