

## Example Load/Store Instructions

Control		Memory	
PC	0x3FB2 N 1 Z 0 P 0	0x3FBD	0x9876
IR	0110 0111 0011 1100	0x3FBE	0x2397
		0x3FBF	0x6014
		0x3FC0	0x3FC9
		0x3FC1	0xFC00
		0x3FC2	0x3FBE
		0x3FC3	0x9944
		0x3FC4	0x1234
		0x3FC5	0x00FF
		0x3FC6	0xAAAA

Control		Memory	
PC	0x3FB2 N 1 Z 0 P 0	0x3FBD	0x9876
IR	0011 0110 0001 0000	0x3FBE	0x2397
		0x3FBF	0x6014
		0x3FC0	0x3FC9
		0x3FC1	0xFC00
		0x3FC2	0x3FBE
		0x3FC3	0x9944
		0x3FC4	0x1234
		0x3FC5	0x00FF
		0x3FC6	0xAAAA

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IR	0111 0110 0001 0000	0x3FBE	0x2397
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		0x3FC2	0x3FBE
		0x3FC3	0x9944
		0x3FC4	0x1234
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		0x3FC2	0x3FBE
		0x3FC3	0x9944
		0x3FC4	0x1234
		0x3FC5	0x00FF
		0x3FC6	0xAAAA

Control

PC

0x3FB2

N

1

Z

0

P

0

IR

1110 0111 1111 1111

Register File

R0

0x3FB5

R4

0x3FC8

R1

0x9F08

R5

0x0000

R2

0xFFFF

R6

0x8000

R3

0xCAFE

R7

0x4242

Memory

0x3FBD

0x9876

0x3FBE

0x2397

0x3FBF

0x6014

0x3FC0

0x3FC9

0x3FC1

0xFC00

0x3FC2

0x3FBE

0x3FC3

0x9944

0x3FC4

0x1234

0x3FC5

0x00FF

0x3FC6

0xAAAA

### Example Programming With Load/Store Instructions

```
.ORIG x0200
```

```
START
```

```

        BR START          ; repeat the program

A       .FILL x42          ; start of the array
        .FILL b111
        .FILL #-3

        .END
```