

# Homework 6

## 6.3

```
1 0011 0000 0000 0000 ;start at x3000
2 1010 000000001110 ;load x4001
3 1010 001000001110 ;load x4000
4 0101 010 010 1 00000 ;reset r2
5 0001 010 010 100001 ;r2=1
6 0001 001 001 111111 ;r1=1
7 0000 100 000000010 ;BRn
8 0001 010 010 000010 ;r2<<1
9 0000 111 111111100 ;BRnzp
10 0001 001 010 100000 ;r1=r2
11 1001 000 000 111111 ;~r0
12 1001 001 001 111111 ;~r1
13 0101 000 000 000001 ;and r0,1
14 1001 000 000 111111 ;~r0
15 1011 000 000000001 ;STI
16 1111 0000 0010 0101 ;HALT
17
18 0100 000000000001 ;.fill x4001
19 0100 000000000000 ;.fill x4000
```

## 7.4

symbol	address
Test	x301F
Finish	x3027
Save3	x3029
Save2	x302A

## 7.18

- (a). LDR R3, R1, #0
- (b). NOT R3 ,R3
- (c). ADD R3, R3, #1

## 7.20

- (a) store the value into the register,then put it into x4000;
- (b) store the value while the program is running.