.ORIG x2000 Instruction Count: 0 PC : 0x2000 CCs: N = 0Z = 1 P = 0Registers: 0: 0x0000 1: 0x0000 2: 0x0000 3: 0x0000 4: 0x0000 5: 0x0000 6: 0x0000 7: 0x0000 AND R0, R0, x0Instruction Count : 1 PC : 0x2001 CCs: N = 0Z = 1 P = 0Registers: 0: 0x0000 1: 0x0000 2: 0x0000 3: 0x0000 4: 0x0000 5: 0x0000 6: 0x0000 7: 0x0000 AND R1,R1,x0 Instruction Count : 2 PC : 0x2002 Z = 1 P = 0CCs: N = 0Registers: 0: 0x0000 1: 0x0000 2: 0x0000 3: 0x0000 4: 0x0000 5: 0x0000 6: 0x0000 7: 0x0000 ADD R0, R0, x-7Instruction Count : 3 : 0x2003 CCs: N = 1 Z = 0 P = 0

Registers:

```
0: 0xfff9
1: 0x0000
2: 0x0000
3: 0x0000
4: 0x0000
5: 0x0000
7: 0x0000
```

ADD R1,R1,x4

Instruction Count : 4 PC : 0×2004 CCs: N = 0 Z = 0 P = 1

Registers: 0: 0xfff9 1: 0x0004

2: 0x0004

3: 0x0000 4: 0x0000

5: 0x0000 6: 0x0000

7: 0x0000

LOOP ADD R0,R1,R0

Instruction Count : 5
PC : 0x2005

CCs: N = 1 Z = 0 P = 0

Registers:
0: 0xfffd

1: 0x0004

2: 0x0000 3: 0x0000

4: 0x0000

5: 0x0000

6: 0×0000 7: 0×0000

BRn LOOP

Instruction Count : 6

PC : 0x2004 CCs: N = 1 Z = 0 P = 0

Registers: 0: 0xfffd

1: 0x0004

2: 0x0000 3: 0x0000

4: 0x0000

```
7: 0x0000
LOOP ADD R0,R1,R0
Instruction Count : 7
    : 0x2005
CCs: N = 0 Z = 0 P = 1
Registers:
0: 0x0001
1: 0x0004
2: 0x0000
3: 0x0000
4: 0x0000
5: 0x0000
6: 0x0000
7: 0×0000
BRn L00P
Instruction Count : 8
PC : 0x2006
CCs: N = 0 Z = 0 P = 1
Registers:
0: 0x0001
1: 0x0004
2: 0x0000
3: 0x0000
4: 0x0000
5: 0x0000
6: 0x0000
7: 0x0000
AND R1,R1,R0
Instruction Count : 9
    : 0×2007
CCs: N = 0 Z = 1 P = 0
Registers:
0: 0x0001
1: 0x0000
2: 0x0000
3: 0x0000
4: 0x0000
5: 0x0000
6: 0x0000
7: 0x0000
NOT R1,R1
```

```
Instruction Count: 10
                  : 0x2008
CCs: N = 1 Z = 0 P = 0
Registers:
0: 0x0001
1: 0xffff
2: 0x0000
3: 0x0000
4: 0x0000
5: 0x0000
6: 0x0000
7: 0x0000
LEA R3, x20
Instruction Count : 11
                 : 0x2009
CCs: N = 1 Z = 0 P = 0
Registers:
0: 0x0001
1: 0xffff
2: 0x0000
3: 0x2029
4: 0x0000
5: 0x0000
6: 0x0000
7: 0x0000
LEA R4, x20
Instruction Count : 12
PC
                   : 0x200a
CCs: N = 1 Z = 0 P = 0
Registers:
0: 0x0001
1: 0xffff
2: 0x0000
3: 0x2029
4: 0x202a
5: 0x0000
6: 0x0000
7: 0×0000
ST R3,x-4
Memory content [0x2000..0x2020] :
 0x2000 (8192) : 0x5020
 0x2001 (8193) : 0x5260
 0 \times 2002 (8194) : 0 \times 1039
 0x2003 (8195) : 0x1264
 0x2004 (8196) : 0x1040
```

```
0 \times 2005 (8197) : 0 \times 9 \text{ fe}
 0x2006 (8198) : 0x5240
 0x2007 (8199) : 0x2029
 0x2008 (8200) : 0xe620
 0x2009 (8201) : 0xe820
 0x200a (8202) : 0x37fc
 0x200b (8203) : 0xb9fb
 0x200c (8204) : 0xabfa
 0x200d (8205): 0x2df9
 0x200e (8206) : 0x6180
 0x200f (8207) : 0x7141
 0x2010 (8208) : 0x5260
 0x2011 (8209) : 0xe402
 0x2012 (8210) : 0x4080
 0x2013 (8211) : 0xf025
 0x2014 (8212) : 0x1267
 0x2015 (8213) : 0xc1c0
 0 \times 2016 (8214) : 0 \times 00
 0 \times 2017 (8215) : 0 \times 00
 0 \times 2018 (8216) : 0 \times 00
 0 \times 2019 (8217) : 0 \times 00
 0x201a (8218) : 0x00
 0x201b (8219) : 0x00
 0 \times 201 c (8220) : 0 \times 00
 0x201d (8221) : 0x00
 0x201e(8222):0x00
 0x201f(8223):0x00
 0 \times 2020 (8224) : 0 \times 00
STI R4,x-5
 0 \times 2028 (8232) : 0 \times 00
 0x2029 (8233) : 0x202a
 0x202a (8234) : 0x00
 0x202b (8235) : 0x00
 0x202c (8236) : 0x00
LDI R5, x-6
Instruction Count : 15
              : 0x200d
PC
CCs: N = 0 Z = 0 P = 1
Registers:
0: 0x0001
1: 0xffff
2: 0x0000
3: 0x2029
4: 0x202a
```

5: 0x202a 6: 0x0000 7: 0x0000

5: 0x202a

LD R6,x-7Instruction Count : 16 PC : 0x200e CCs: N = 0 Z = 0 P = 1Registers: 0: 0x0001 1: 0xffff 2: 0x0000 3: 0x2029 4: 0x202a 5: 0x202a 6: 0x2029 7: 0x0000 LDR R0, R6, x0 Instruction Count: 17 PC : 0x200f CCs: N = 0 Z = 0 P = 1Registers: 0: 0x202a 1: 0xffff 2: 0x0000 3: 0x2029 4: 0x202a 5: 0x202a 6: 0x2029 7: 0x0000 STR R0,R5,x1 $0 \times 2028 (8232) : 0 \times 00$ 0x2029 (8233) : 0x202a 0x202a (8234) : 0x000x202b (8235) : 0x202a 0x202c (8236) : 0x00AND R1,R1,x0 Instruction Count: 19 : 0x2011 CCs: N = 0 Z = 1 P = 0Registers: 0: 0x202a 1: 0x0000 2: 0x0000 3: 0x2029 4: 0x202a

```
7: 0x0000
LEA R2,x2
Instruction Count : 20
PC : 0x2012
CCs: N = 0 Z = 1 P = 0
Registers:
0: 0x202a
1: 0×0000
2: 0x2014
3: 0x2029
4: 0x202a
5: 0x202a
6: 0x2029
7: 0×0000
JSRR R2
Instruction Count : 21
PC : 0x2014
CCs: N = 0 Z = 1 P = 0
Registers:
0: 0x202a
1: 0x0000
2: 0x2014
3: 0x2029
4: 0x202a
5: 0x202a
6: 0x2029
7: 0x2013
ADD R1,R1,x7
Instruction Count : 22
    : 0x2015
CCs: N = 0 Z = 0 P = 1
Registers:
0: 0x202a
1: 0x0007
2: 0x2014
3: 0x2029
4: 0x202a
5: 0x202a
6: 0x2029
7: 0x2013
RET
```

Registers: 0: 0x202a 1: 0x0007 2: 0x2014 3: 0x2029 4: 0x202a

5: 0x202a

6: 0x2029 7: 0x2013

HALT

Instruction Count : 24 PC : 0x0000

CCs: N = 0 Z = 0 P = 1

Registers: 0: 0x202a

1: 0×0007

2: 0x2014

3: 0x2029 4: 0x202a

4: 0x202a 5: 0x202a

6: 0x2029