```
0
   add x1 x5 x6 IF | ID | EX | ME |
1
   2
3
                               Α
                                   Α
   addi x8 x9 1
                      IF | ID | EX | ME | WB
4
5
6
   beg x1 x2 label
                           IF | ID | EX | ME | WB
7
                               N
                                   N
8
9
   add x1 x5 x6 IF | ID | EX | ME | WB
10
   11
12
                                Α
                       IF | ID | -- | -- | --
13
   beg stalled
14
                                N
                           IF | ID | EX | ME | WB
15
   beg x1 x2 label
16
                               N
                                   N
17
   18
19
20
   21
                                Α
                                    Α
                                       l W
22
   beq stalled
                       IF | ID | -- | -- | --
23
                                N
24
   beq x1 x2 label
                                ID | EX | ME | WB
25
                                N
                                    N
26
27
   add x1 x5 x6 IF | ID | EX | ME
                              l WB
28
                               Α
29
   lw x2 0(x5)
                   IF | ID | EX | ME | WB
30
                                    Α
31
   beg stalled
                       IF | ID | -- | -- | --
32
                           N
                                N
33
                                ID | -- | -- | --
   beg stalled
34
                                    N
35
   beg x1 x2 label
                                IF | ID | EX | ME | WB
36
                                    N
                                        N
37
   38
39
                   IF | ID | -- | --
40
   add stalled
41
                                    Α
                                Α
42
   add x2 x1 x1
                       IF | ID | EX
                                    ME
                                       | WB
43
                                    Α
                                        Α
                           IF | ID | -- | -- | --
44
   beq stalled
45
                                N
                                    N
46
   beg stalled
                                    ID | -- | -- | --
47
                                    IF | ID | EX | ME | WB
48
   beg x1 x2 label
49
                                        N N
```