

```

1. last = '0';
2. penultimate = '0';
→ 3. c = nextCharInput();
4. Print("No Good.");
5. last = c;
→ 6. c = nextCharInput();
7. Print("No Good.");
8. penultimate = last;
9. last = c;
→ 10. c = nextCharInput();
11. if (penultimate != last && last == c)
    Print("OK")
    else Print("No Good.");
    11a penultimate = last;
    11b last = c;
12. GOTO to 10;

```

Lecture 17 input: string of 0s and 1s.

Rejects: 0, 1, 00, 01, 10, 11

Allow: xx...xabc
≠

Good:

10011, 10100,

111011, 111100,

Bad:

10111 or

110010

c is a temp variable.

Chomsky

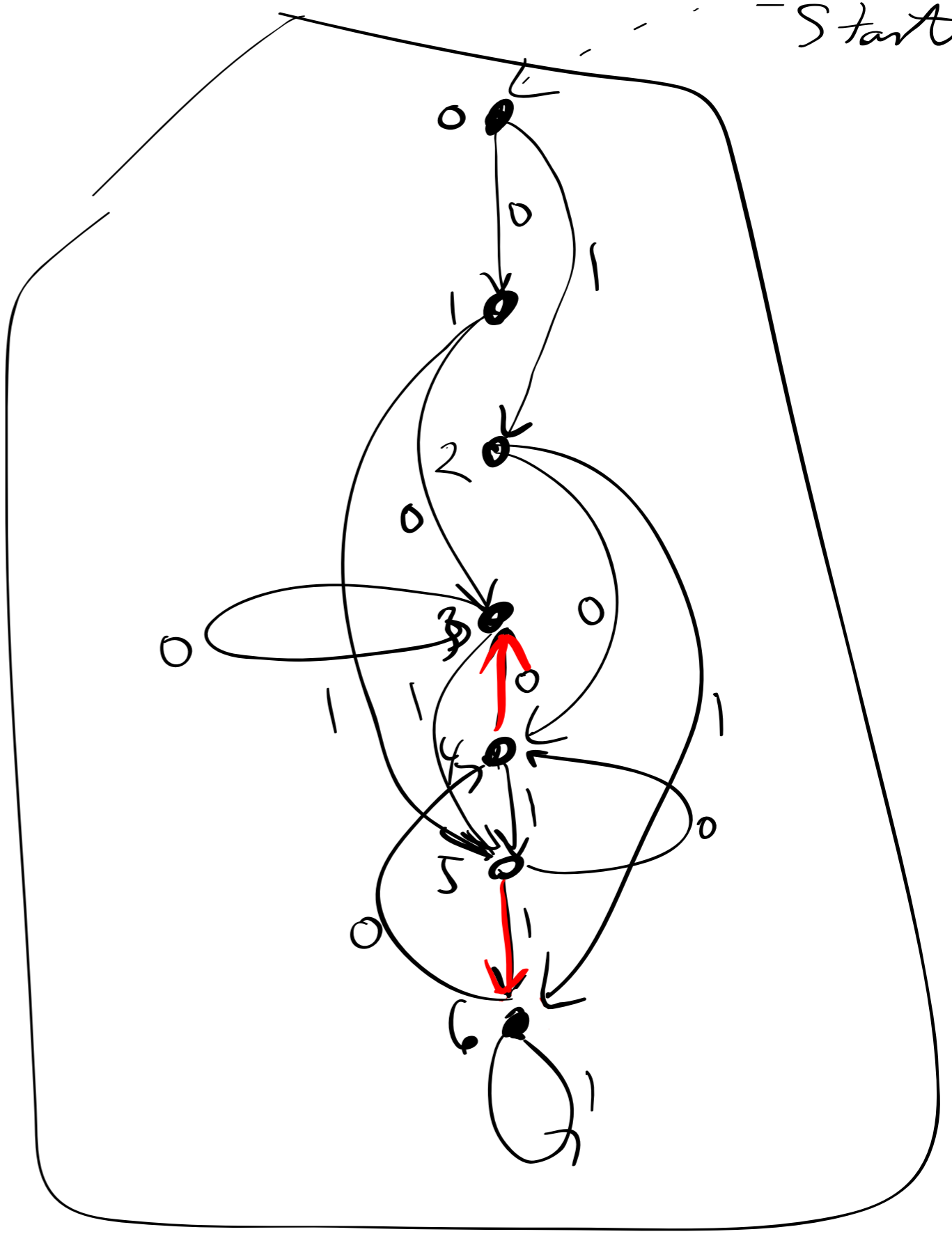
At 3., 6., 10: what determines next message?

Need: nextChar, last, penultimate

Program Counter

- Start.

State	PC	penultimate	last
0	3	0	0
1	6	0	0
2	6	0	1
3	10	0	0
4	10	1	0
5	10	0	1
6	10	1	1



~~means "OK"~~
→ means "ok"

Finite State Automata

F.S.A.
(in a more
common form)

State = vertices.

Arcs with labels 0 or 1

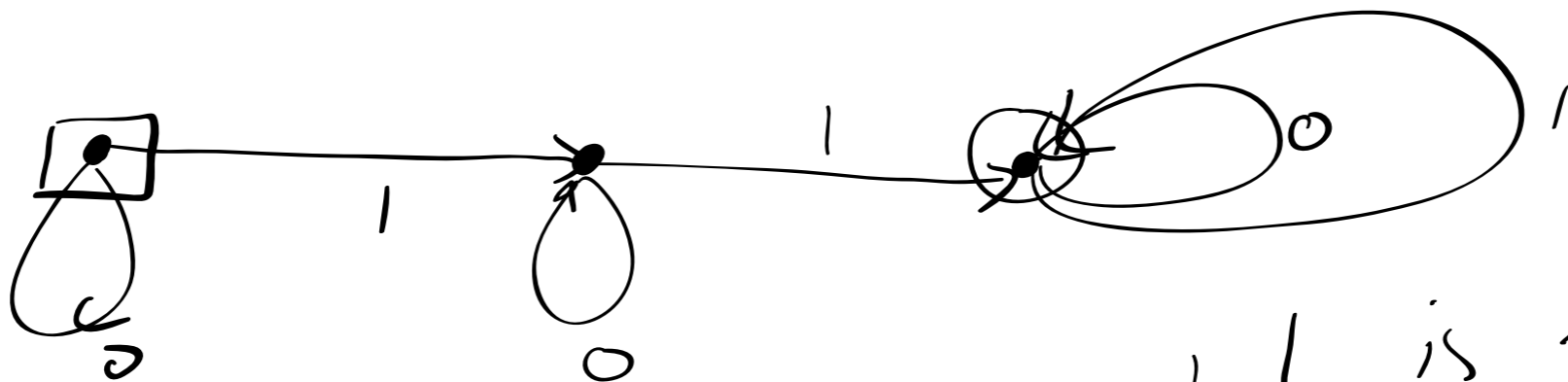
◻ Start

out-degree = 2

one labeled 0

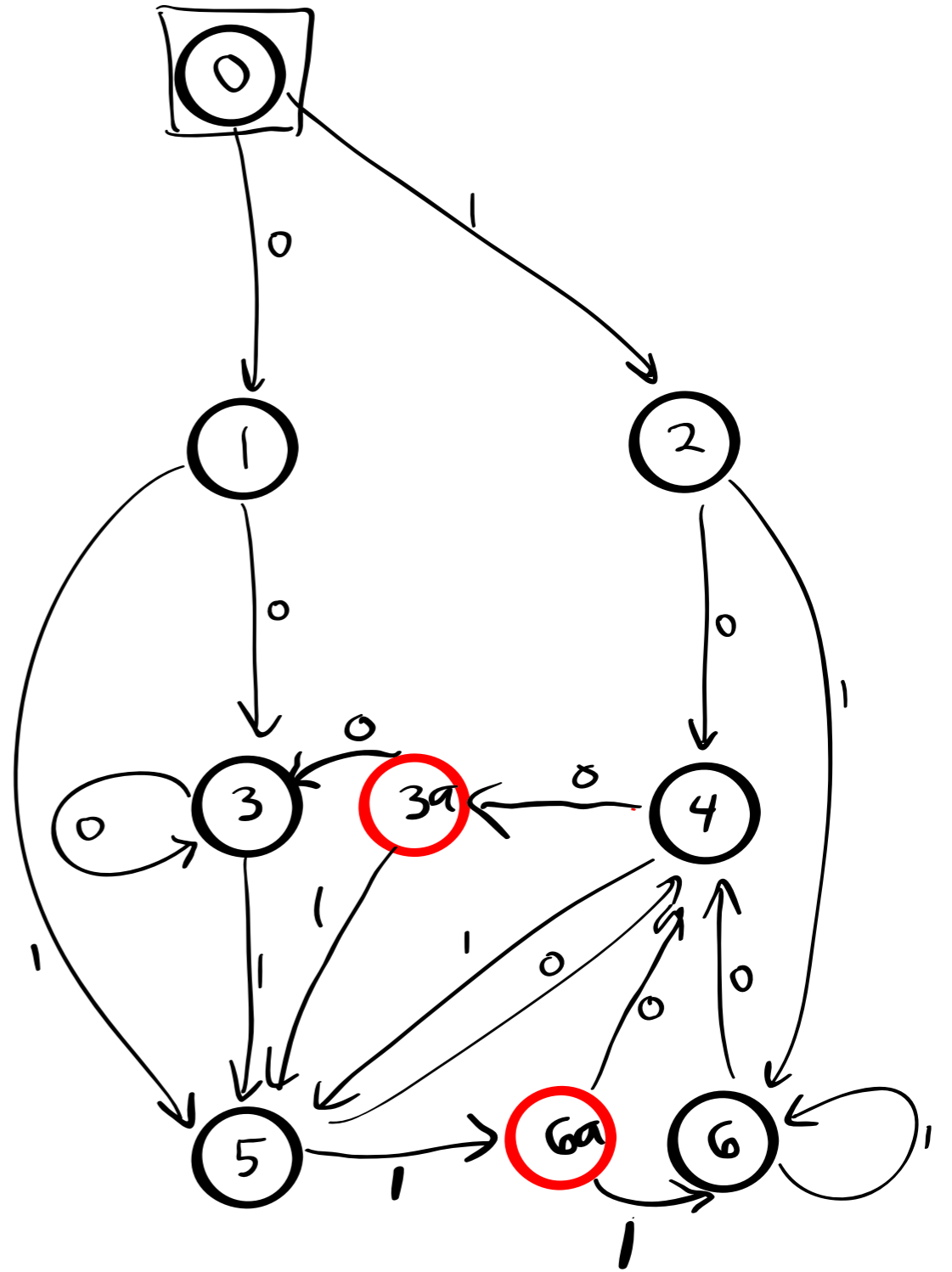
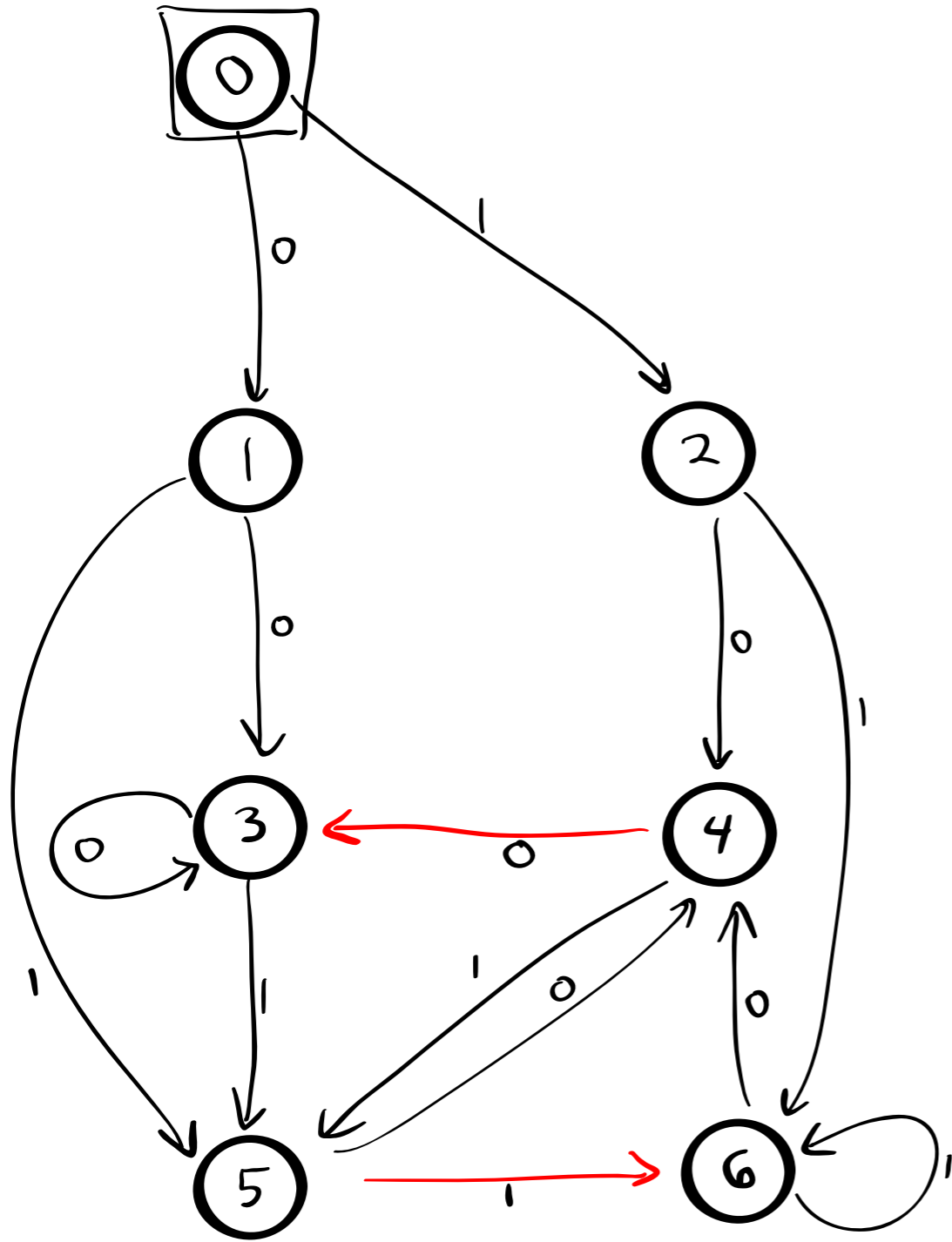
one labeled 1.

⊙ finish/accept (can have many of these)



L: 11, 11*, 11**, ...
0101, 0101*, ...

L is the language
of words with at
least two ones



○ = acceptance state