```
.cir:
G0, NOT, w1, C
G2,AND, w1, A
G1, AND2, w2, A, w1
G3, AND, w3, w2, w1
.stim:
500,A, 1
800, B, 1
1300, C, 1
```

At time 500,
we have input A:1.
Checking used gates: G0 has input C != A
G1 has input (A & w1) = 0

At time 800,
We have inputs A:1, B:1
Checking used gates: G0 has input C != A & C != B
G1 has inputs (A & w1) = 0

At time 1300,
We have inputs A:1, B:1, C:1
Checking used gates: G0 has input C == C (set a flag to call the function)
G1 has inputs (A & w1) != A,B,C
Flag logic gate go to function expression

At time 1300 - 1350,
evaluate output (delay gate)(get logic value) -> add output to cirInputs (w1, 0, 1350) -> we can't pop the gate since
we will need to use it again

At time 1350,
We have inputs A:1, B:1, C:1, w1:0
Checking used gates: G0 has input C == C **(don't do C again unless it changes)**
G1 has inputs (A & w1) == A, w1 (set a flag to call the function)
Flag logic gate go to function expression

At time 1350 - 1550,
evaluate output (delay gate)(get logic value) -> add output to cirInputs (w2, 0, 1550) -> we can't pop the gate
since we will need to use it again

At 1550,
Checking used gates,
G1 w1 & w2