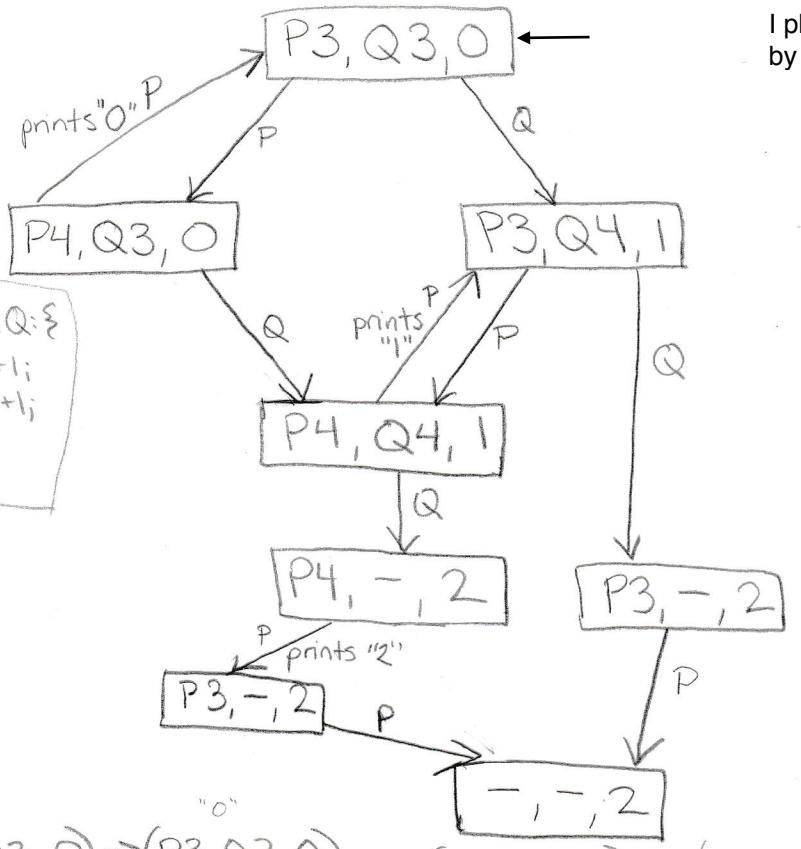
Jennifer Cafiero & Katie Prescott

I pledge my honor that I have abided by the Stevens Honor System

① (IP_P, IP_Q, n)




```
1 global int n=0;
2 thread P: {        2 thread Q: {
3   while(n<2)       3   n=n+1;
4     print n;       4   n=n+1;
5 }                  5 }
```

② 012:
(P3,Q3,0) → (P4,Q3,0) → (P3,Q3,0) → (P3,Q4,1) → (P4,Q4,1) → (P3,Q4,1) → (P4,Q4,1) → (P4,−,2) → (P3,−,2) → (−,−,2)
("0" "1" "2")

002:
(P3,Q3,0) → (P4,Q3,0) → (P3,Q3,0) → (P4,Q3,0) → (P3,Q3,0) → (P3,Q4,1) → (P4,Q4,1) → (P4,−,2) → (P3,−,2) → (−,−,2)
("0" "2")

02:
(P3,Q3,0) → (P4,Q3,0) → (P3,Q3,0) → (P4,Q3,0) → (P4,Q4,1) → (P4,−,2) → (P3,−,2) → (−,−,2)
("0" "2")

③ No — not if Q thread executes completely first

④ 2 can appear at most once in the output, 0 or 1 times

⑤ 1 can appear finitely many times (up to infinity noninclusive)

⑥ 0 can appear finitely many times (up to infinity noninclusive)

⑦ The shortest sequence of outputted numbers is 0 (see #3)