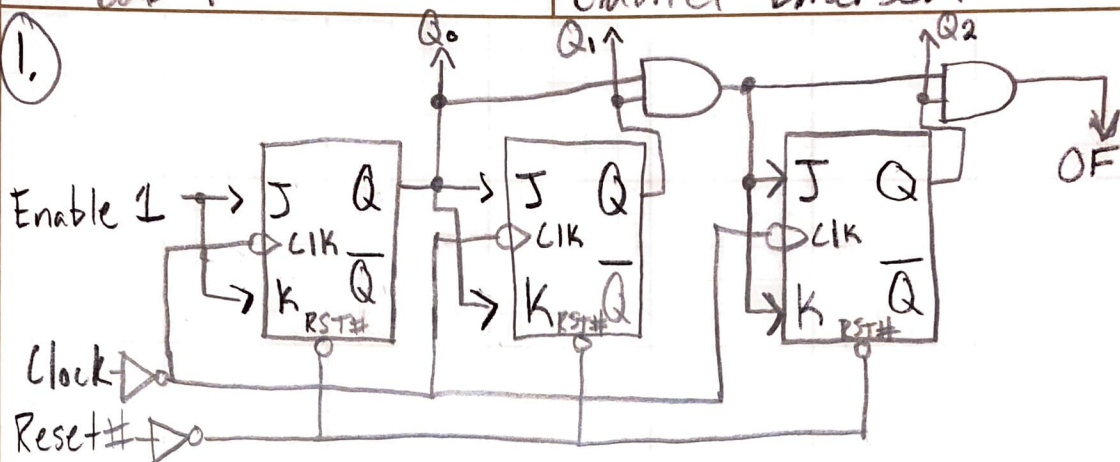


1.



2.

a) Low

b) Binary: 1101

Decimal: 13

c) Binary: 0010

Decimal: 2

d) Borrow output sends a signal equal in width to the count down input when the counter underflows

Carry output sends signal equal in width to the count down when the counter overflows

* In order of Question
Q₀, Q₁, Q₂, Q_a