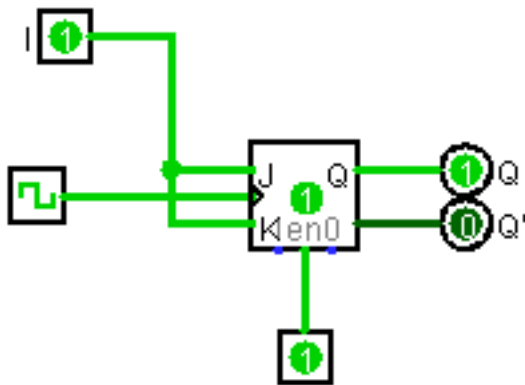


# DD Lab 7 Assignment

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2020A3PS0435P

October 23, 2021

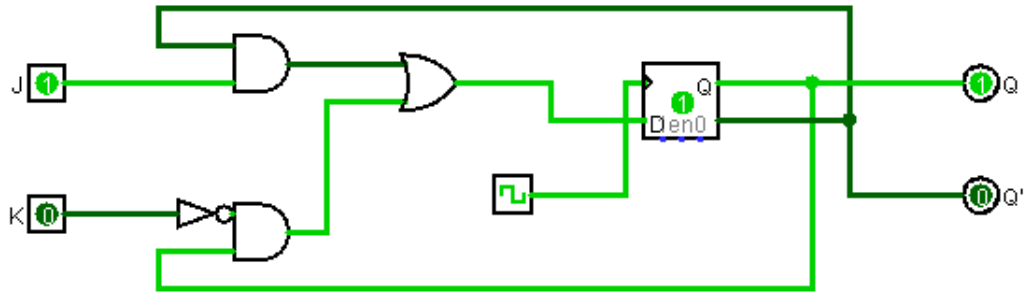
## 1 T flip-flop using JK flip-flop



The truth table for the above circuit:

| J | K | T | $Q_n$ | $Q_{n+1}$ |
|---|---|---|-------|-----------|
| 0 | 0 | 0 | 0     | 0         |
| 1 | 1 | 1 | 0     | 1         |
| 1 | 1 | 1 | 1     | 0         |
| 0 | 0 | 0 | 1     | 1         |

## 2 JK flip-flop using D flip-flop



The truth table for the above circuit:

| J | K | D | $Q_n$ | $Q_{n+1}$ |
|---|---|---|-------|-----------|
| 0 | x | 0 | 0     | 0         |
| 1 | x | 1 | 0     | 1         |
| x | 1 | 0 | 1     | 0         |
| x | 0 | 1 | 1     | 1         |