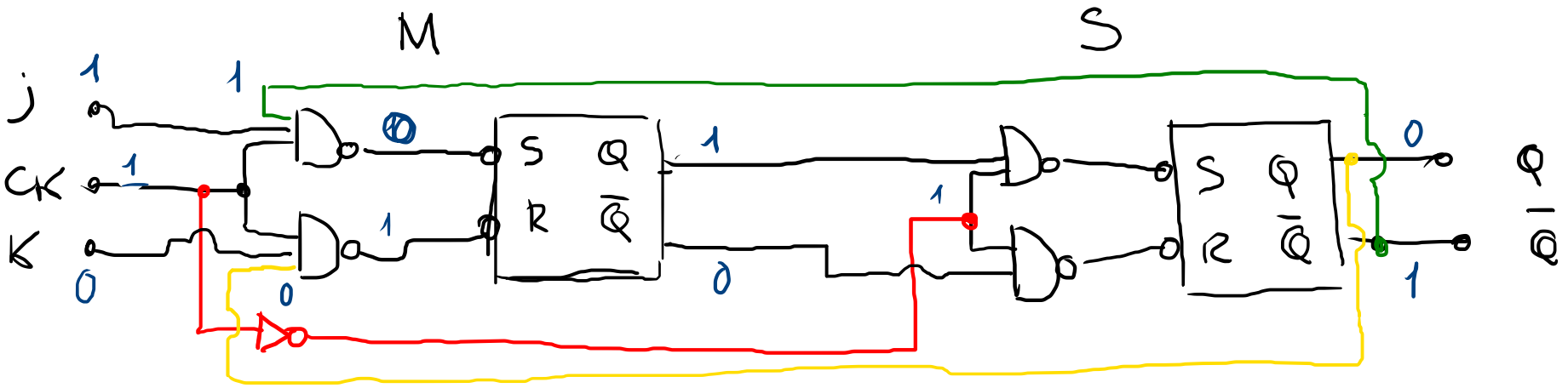
# 221 JK - MASTER-SLAVE

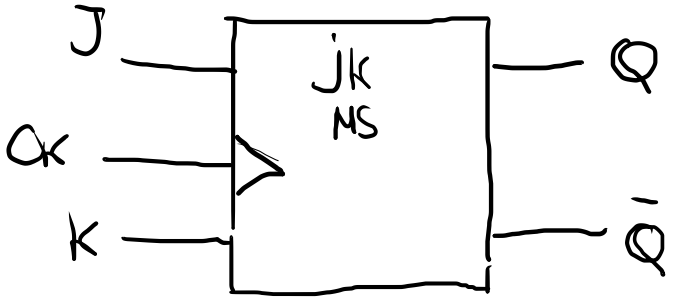


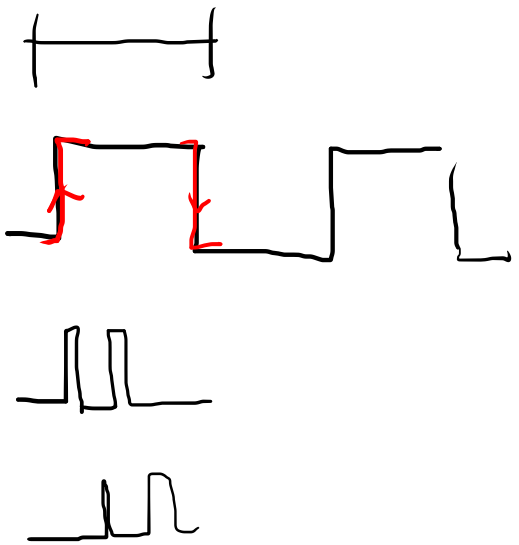

NAND

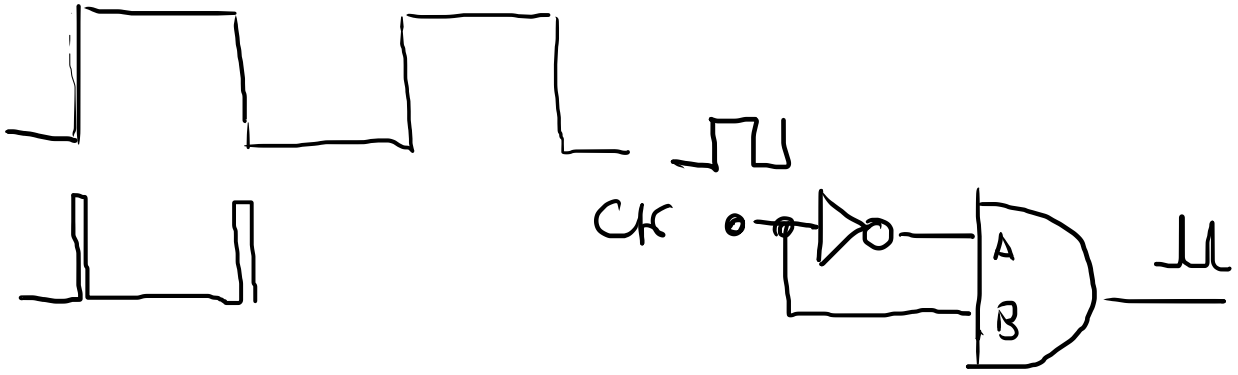
| A B | 0 |
|---|---|
| 0 0 | 1 |
| 0 1 | 1 |
| 1 0 | 1 |
| 1 1 | 0 |

| S R | Q |
|---|---|
| 0 0 | |
| 0 1 | 1 |
| 1 0 | 0 |
| 1 1 | Q |

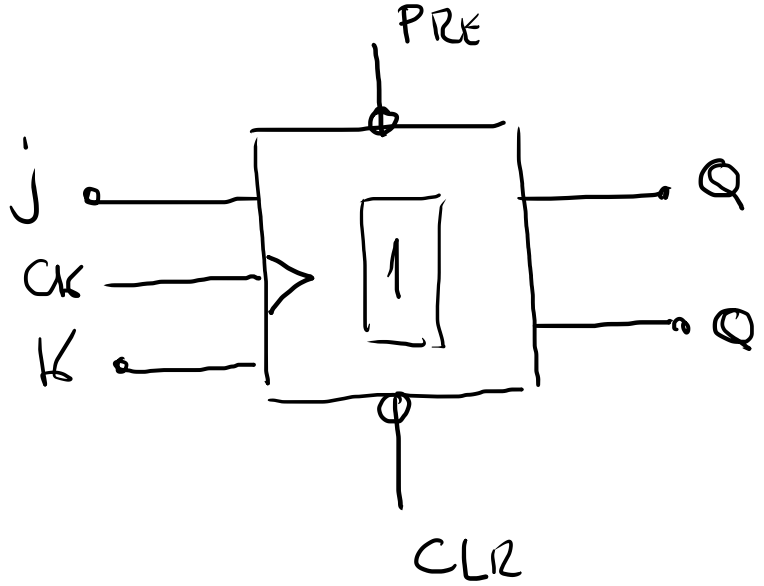
| J | K | CK | Q | |
|---|---|---|---|---|
| 0 | 0 | ⎍ | Q | hold |
| 0 | 1 | ⎍ | 0 | |
| 1 | 0 | ⎍ | 1 | |
| 1 | 1 | ⎍ | toggle | |






edge triggered




| $\overline{PRE}$ | $\overline{CLR}$ | J | K | CK | Q |
|---|---|---|---|---|---|
| 0 | 1 | X | X | X | 1 |
| 1 | 0 | X | X | X | 0 |
| 1 | 1 | 0 | 0 | ⎍ | Q |
| 1 | 1 | 1 | | ⎍ | 1 |
| 1 | 1 | | 1 | ⎍ | 0 |
| 1 | 1 | 1 | 1 | ⎍ | Toggle |