From the circuit below complete the timing diagram, assume positive edge and $\mathrm{Qs}=\mathbf{0}$ at $\mathrm{t}=\mathbf{0}$


| J | K | Present <br> State <br> $(Q)$ | Next <br> State <br> $(Q)$ |
| :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | No <br> Change |
| 0 | 0 | 1 |  |
| 0 | 1 | 0 |  |
| 0 | 1 | 1 | Set |
| 1 | 0 | 0 |  |
| 1 | 0 | 1 | Toggle |
| 1 | 1 | 0 |  |
| 1 | 1 |  |  |


| D | Present <br> State <br> $(\mathrm{Q})$ | Next <br> State <br> $(Q)$ |
| :---: | :---: | :---: |
| 0 | 0 | 0 |
| 0 | 1 |  |
| 1 | 0 | 1 |
| 1 | 1 |  |

