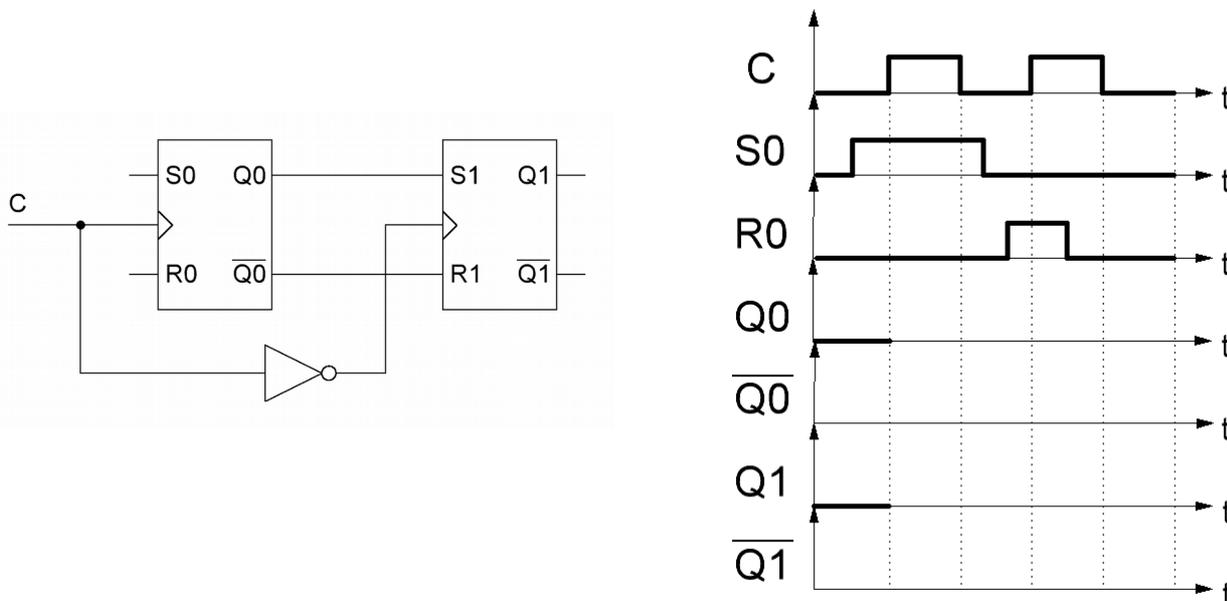


T.D. 3

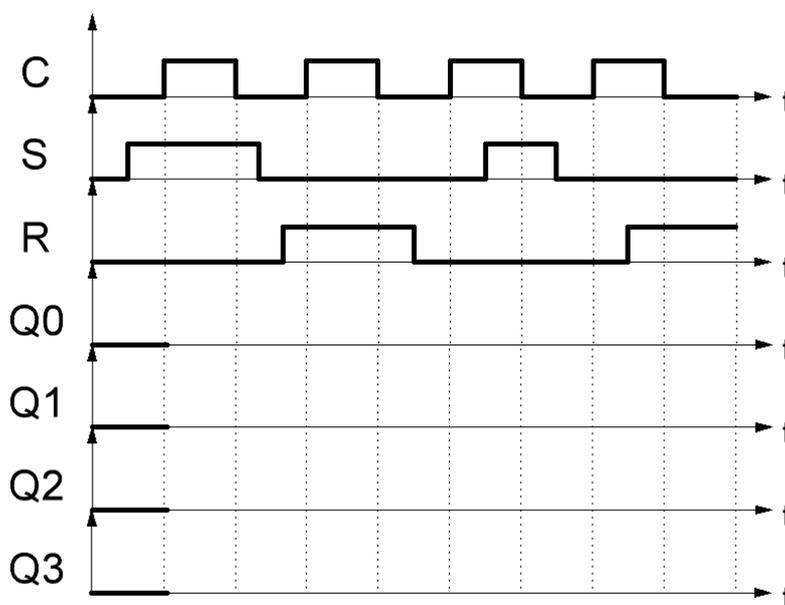
Les bascules

Exercice 1 : Bascules RS

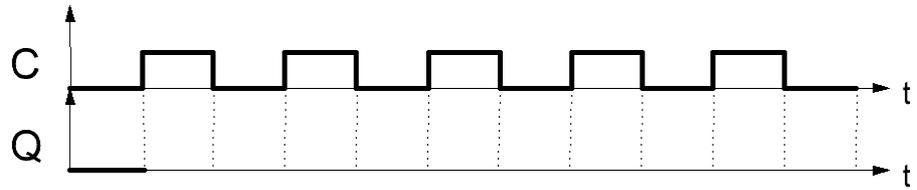
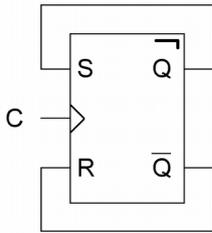
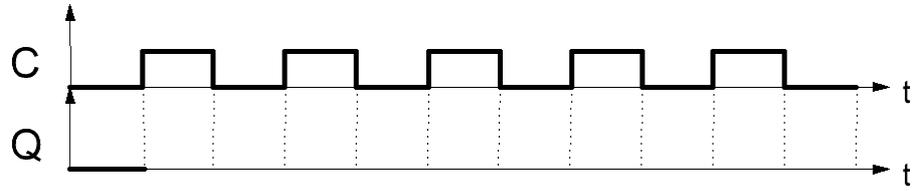
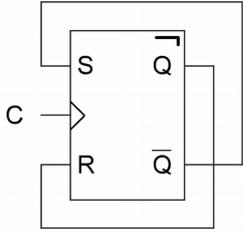
1. Complétez le chronogramme du circuit ci-dessous. Si l'on considère la totalité de ce circuit comme une seule bascule RS, quel est son mode de synchronisation ?



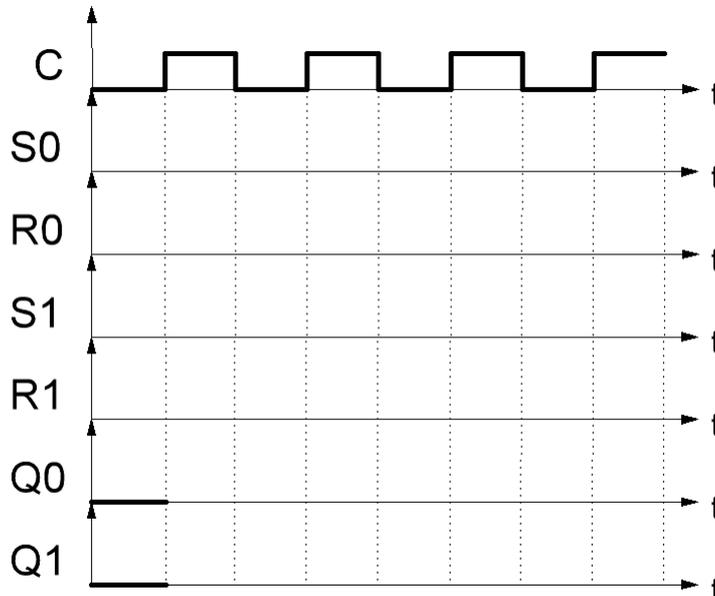
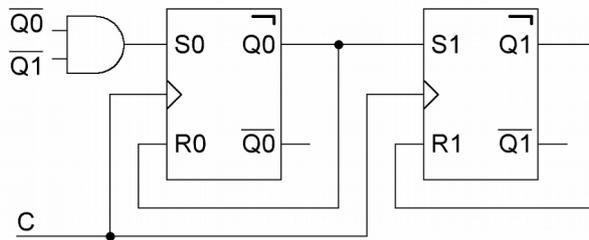
2. Complétez les chronogrammes suivants selon que la bascule RS est synchronisée sur état haut (Q0), sur front montant (Q1), sur front descendant (Q2) et sur impulsion (Q3).

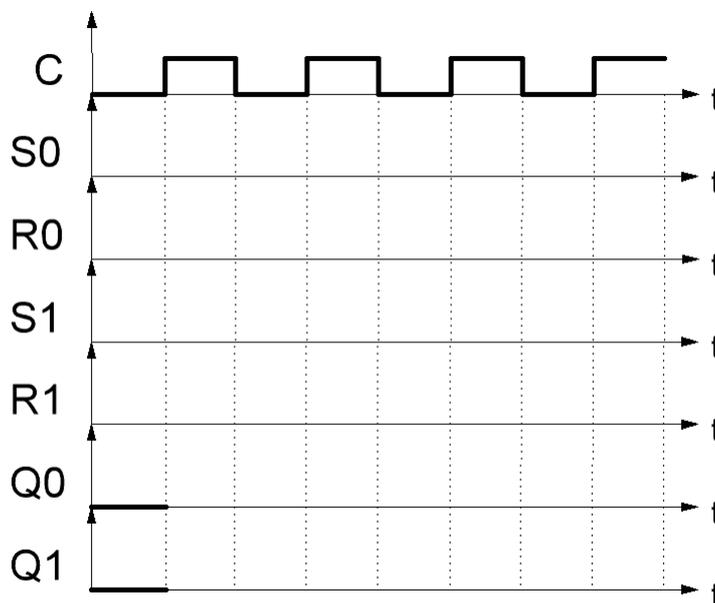
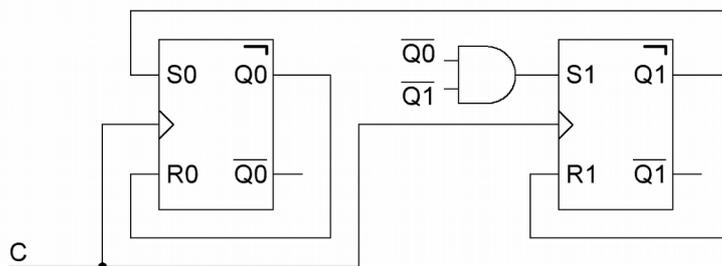
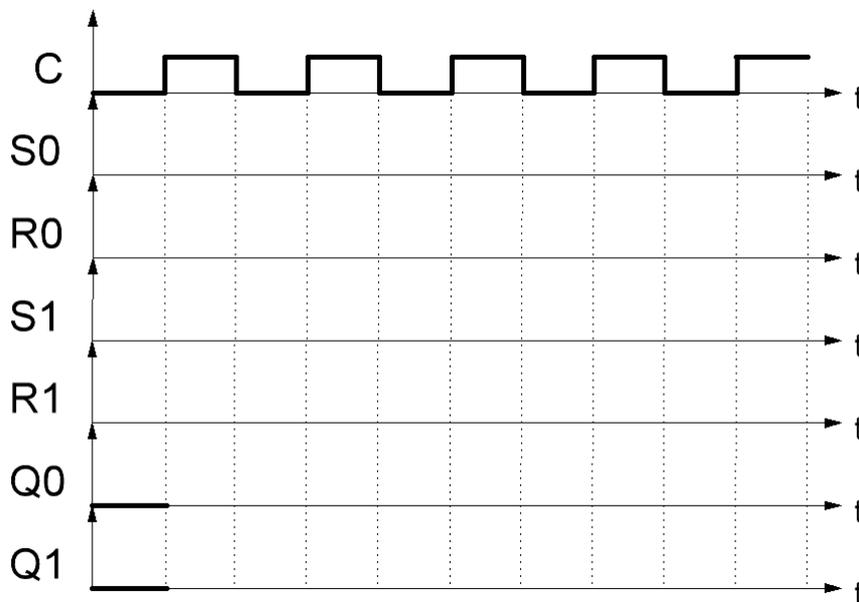
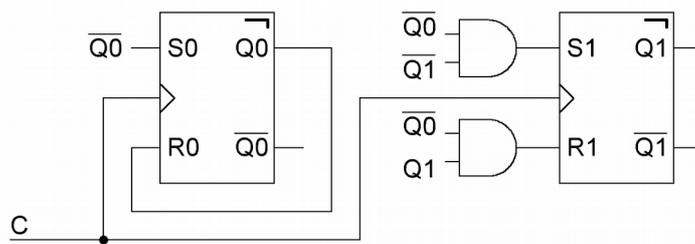


3. Tracez le chronogramme de la sortie Q pour chacun des deux circuits ci-dessous. Dans le premier circuit, quel est le rapport entre la fréquence de Q et celle de C ? Comment appelle-t-on ce montage ?



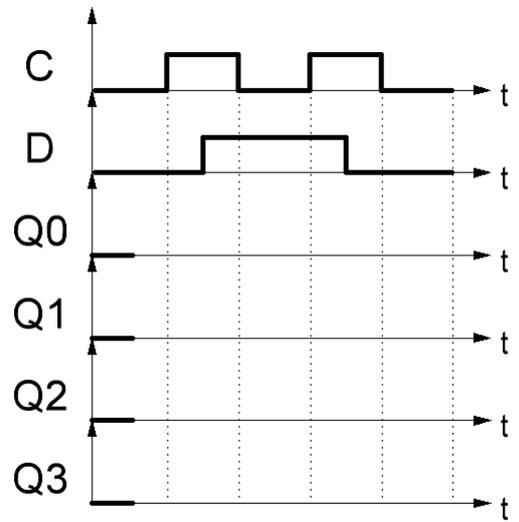
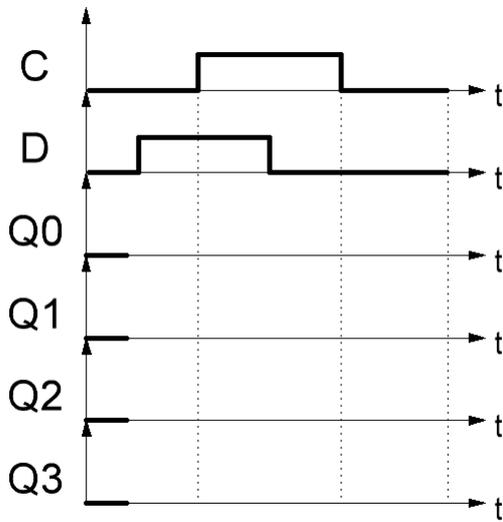
4. Complétez les chronogrammes des circuits ci-dessous.



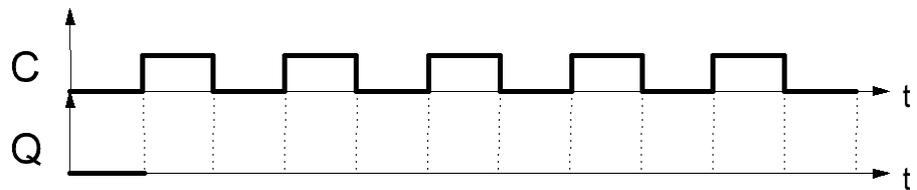
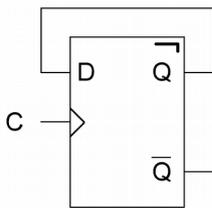
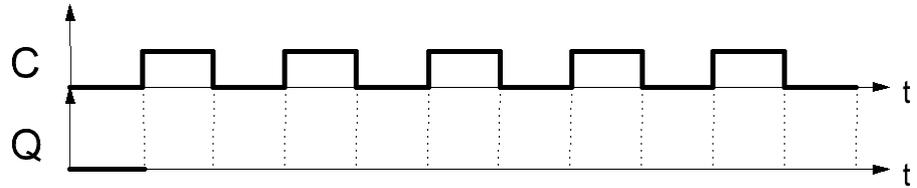
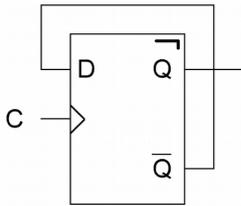


Exercice 2 : Bascules D

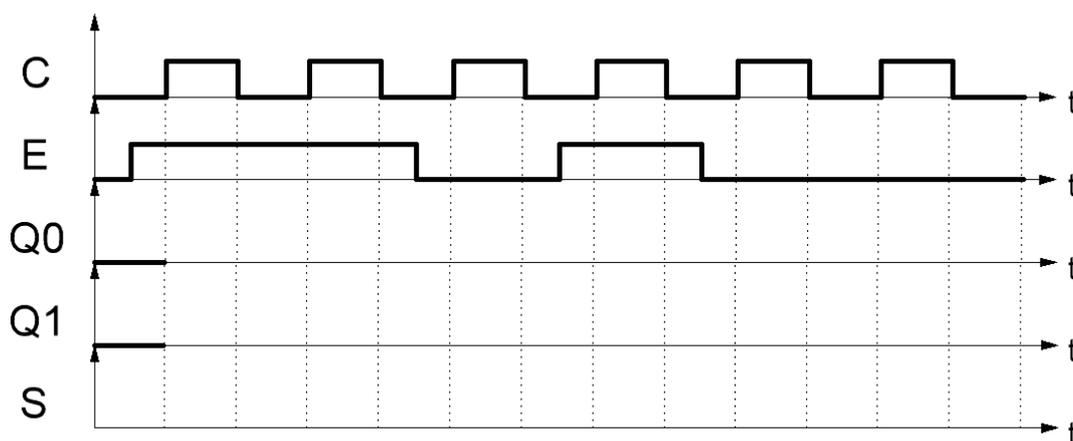
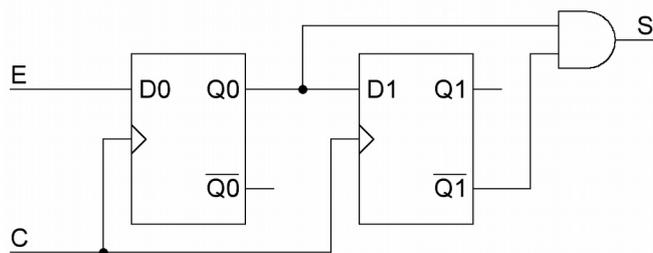
1. Complétez les chronogrammes suivants selon que la bascule D est synchronisée sur état haut (Q0), sur front montant (Q1), sur front descendant (Q2) et sur impulsion (Q3).



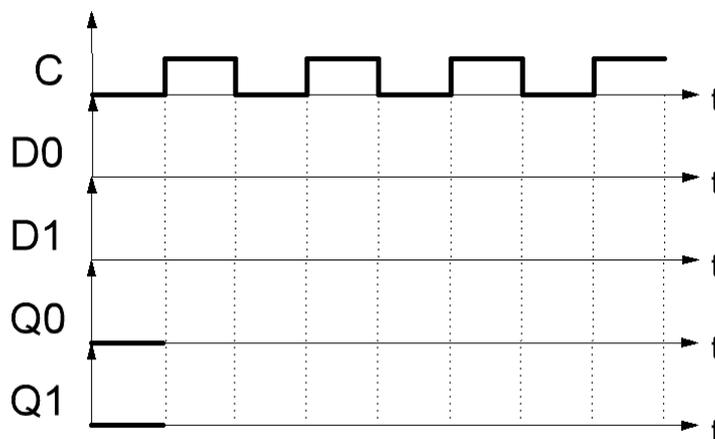
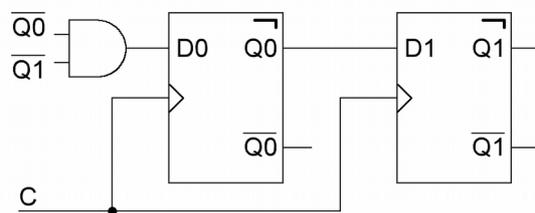
2. Tracez le chronogramme de la sortie Q pour chacun des deux circuits ci-dessous.

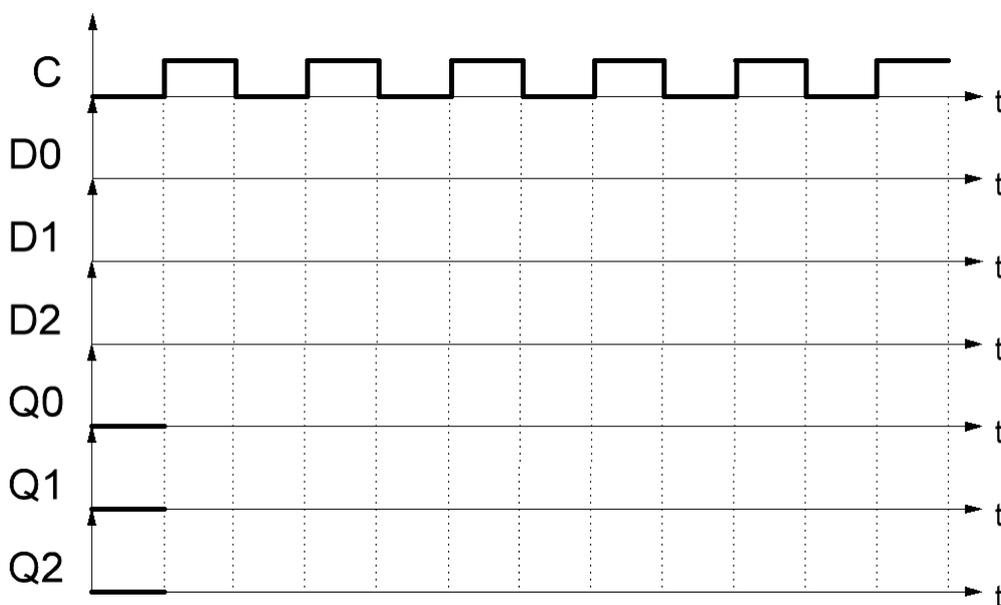
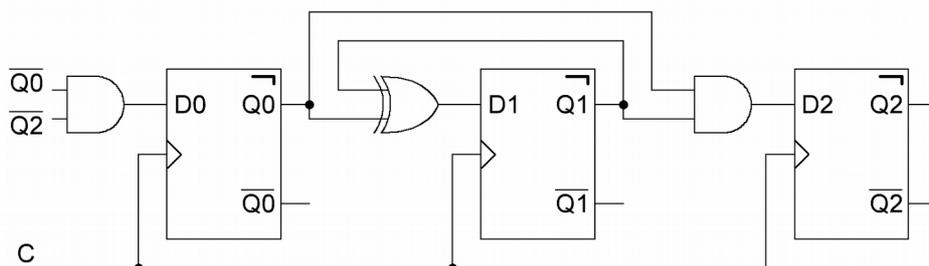
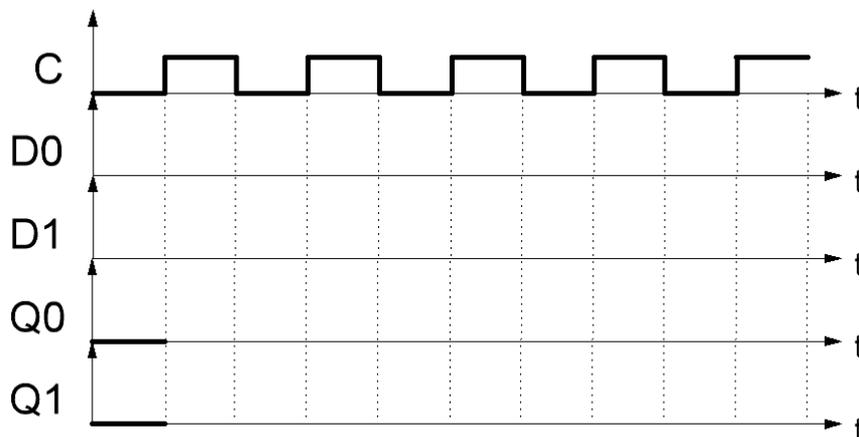
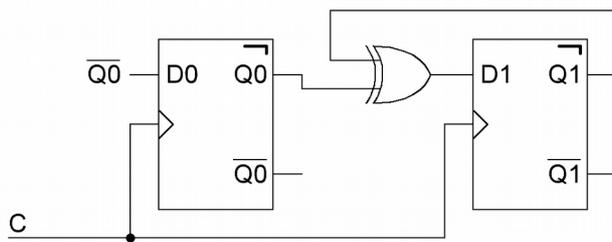


3. Complétez le chronogramme du circuit suivant.



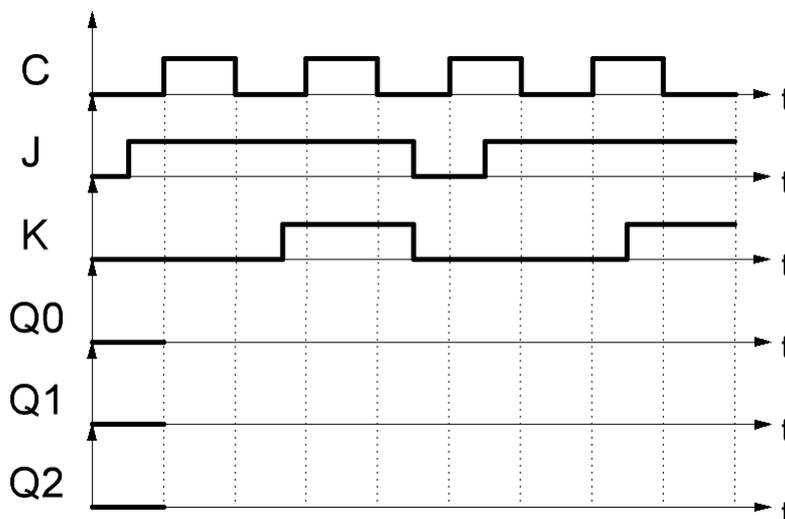
4. Complétez les chronogrammes des circuits ci-dessous.



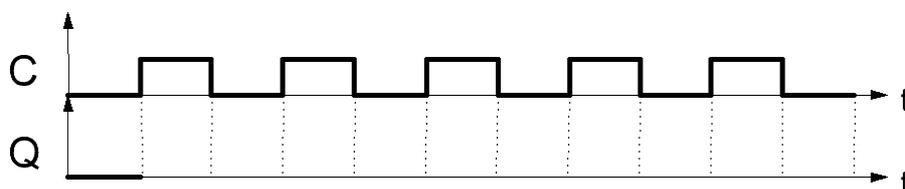
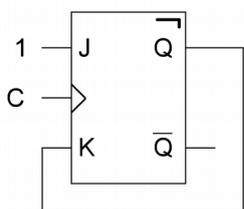
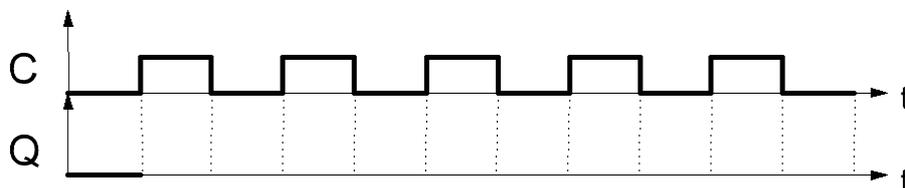
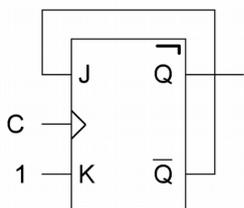


Exercice 3 : Bascules JK

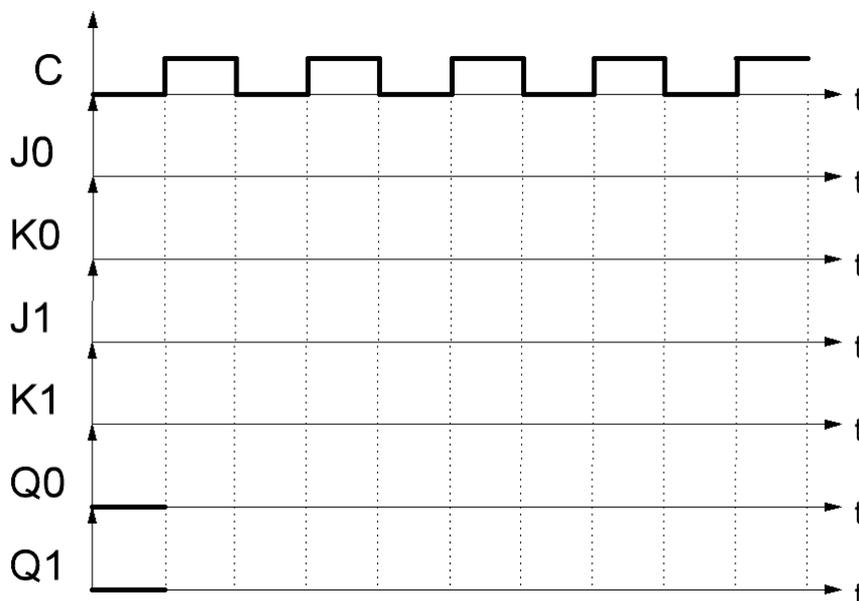
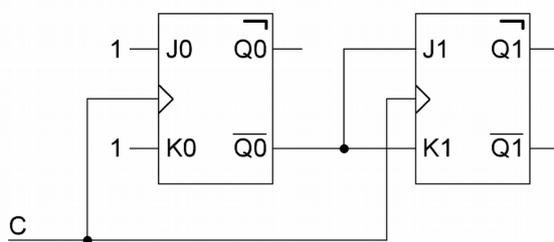
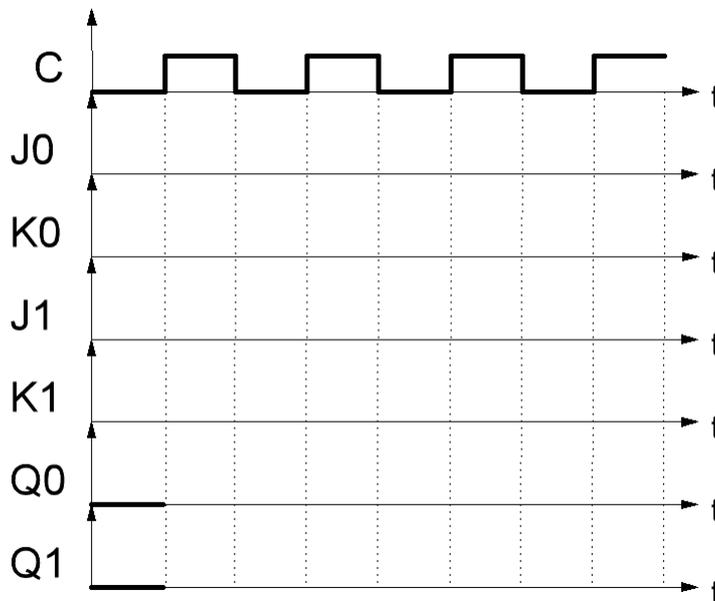
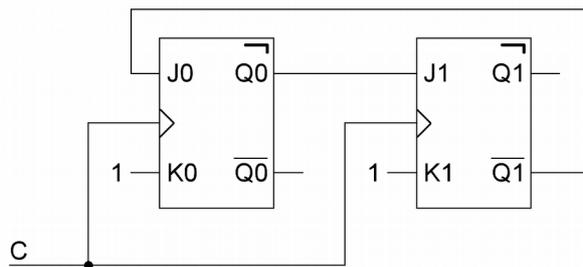
1. Complétez les chronogrammes suivants selon que la bascule JK est synchronisée sur front montant ($Q0$), sur front descendant ($Q1$) et sur impulsion ($Q2$).

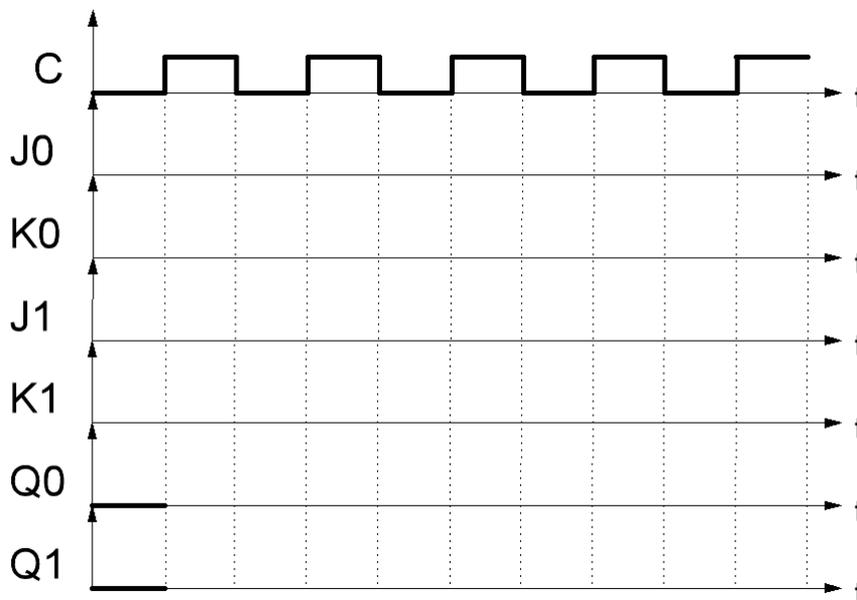
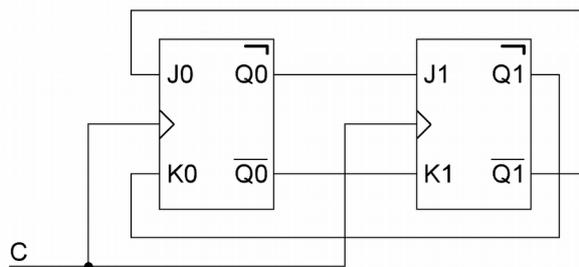


2. Tracez le chronogramme de la sortie Q pour chacun des deux circuits ci-dessous. Quel est le rapport entre la fréquence de Q et celle de C ? Comment appelle-t-on ces montages ? Trouvez une autre façon d'obtenir le même rapport entre ces deux fréquences.

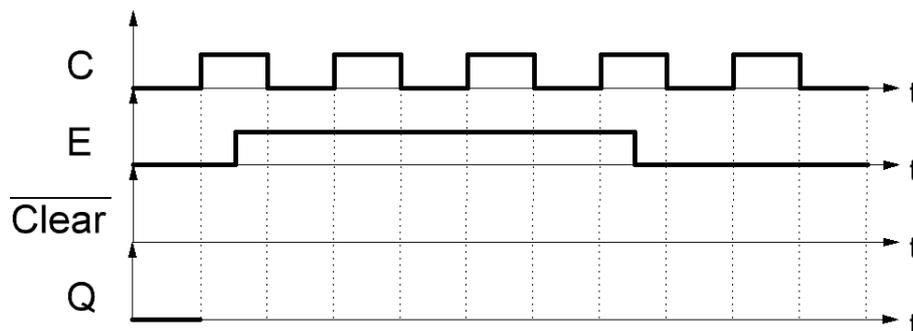
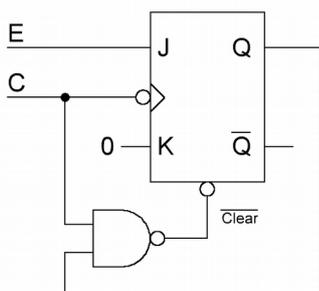


3. Complétez les chronogrammes des circuits ci-dessous.





4. Complétez le chronogramme du circuit ci-dessous.



5. Complétez le chronogramme du circuit ci-dessous.

