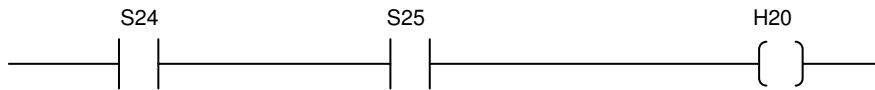


Svar övningar PLC 2

1. $H20 = S24 \bullet S25$

S24	S25	H20
0	0	0
0	1	0
1	0	0
1	1	1



2. $H20 = \overline{S24} \bullet \overline{S25}$

S24	S25	H20
0	0	1
0	1	0
1	0	0
1	1	0



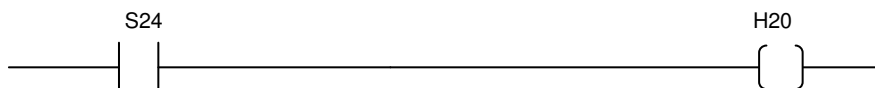
3. $H20 = S24 \bullet \overline{S25}$

S24	S25	H20
0	0	0
0	1	0
1	0	1
1	1	0



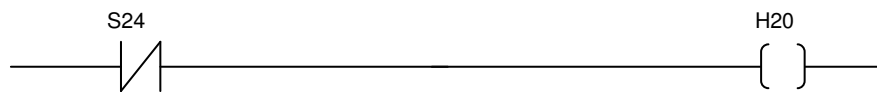
4. $H20 = S24$

S24	H20
0	0
1	1



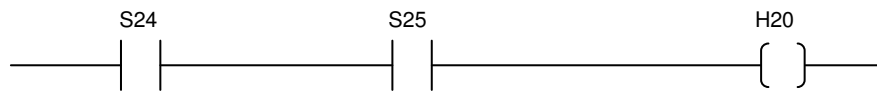
5. $H20 = \overline{S24}$

S24	H20
0	1
1	0



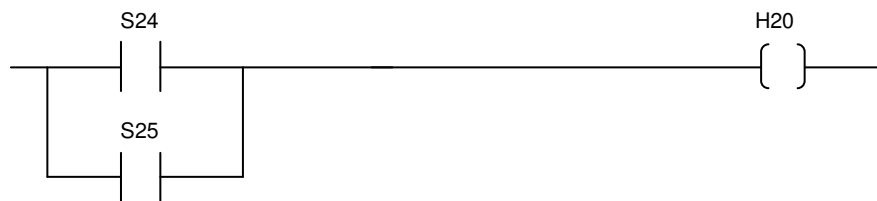
6. $H20 = S24 \bullet S25$

S24	S25	H20
0	0	0
0	1	0
1	0	0
1	1	1



7. $H20 = S24 + S25$

S24	S25	H20
0	0	0
0	1	1
1	0	1
1	1	1



8. $H20 = S24 \bullet \overline{S25}$

S24	S25	H20
0	0	0
0	1	0
1	0	1
1	1	0



9. $H20 = \overline{S24} \bullet \overline{S25}$

S24	S25	H20
0	0	1
0	1	0
1	0	0
1	1	0



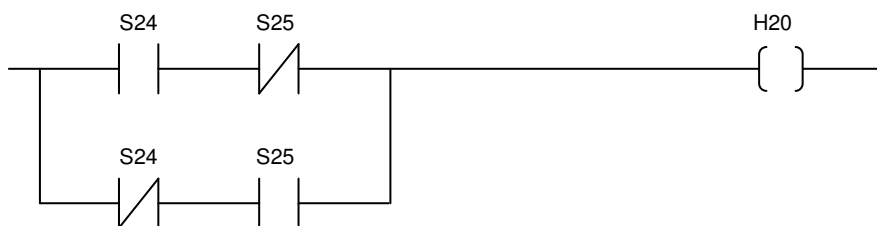
10. $H20 = \overline{S24} \bullet \overline{S25}$ Samma som uppgift 9.

S24	S25	H20
0	0	1
0	1	0
1	0	0
1	1	0



11. $H20 = (S24 \bullet \overline{S25}) + (\overline{S24} \bullet S25) = H20 = S24 \oplus S25$ XOR

S24	S25	H20
0	0	0
0	1	1
1	0	1
1	1	0



12. $H20 = \overline{S26}$

S26	H20
0	1
1	0



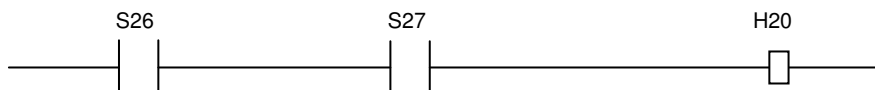
13. $H20 = S26$

S26	H20
0	0
1	1



14. $H20 = S26 \bullet S27$

S26	S27	H20
0	0	0
0	1	0
1	0	0
1	1	1



15. $H20 = \overline{S26} \bullet \overline{S27}$

S26	S27	H20
0	0	1
0	1	0
1	0	0
1	1	0



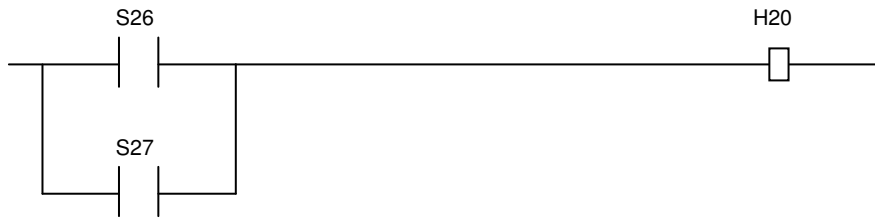
16. $H20 = \overline{S26} + \overline{S27}$

S26	S27	H20
0	0	1
0	1	1
1	0	1
1	1	0



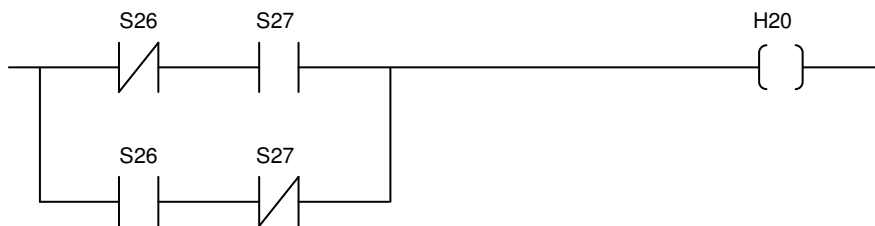
17. $H20 = S26 + S27$

S26	S27	H20
0	0	0
0	1	1
1	0	1
1	1	1



18. $H20 = (\overline{S26} \bullet S27) + (S26 \bullet \overline{S27})$

S26	S27	H20
0	0	0
0	1	1
1	0	1
1	1	0



19. $H20 = (\overline{S20} \bullet S24 \bullet S25) + S20 \bullet (S24 + S25)$

20. $H20 = ((S24 \bullet S25) + S27) \bullet S26$

S24	S25	S26	S27	H20
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	1
1	1	1	1	1

$$21. H20 = (\overline{S24} \bullet S25) + (S24 \bullet \overline{S25})$$

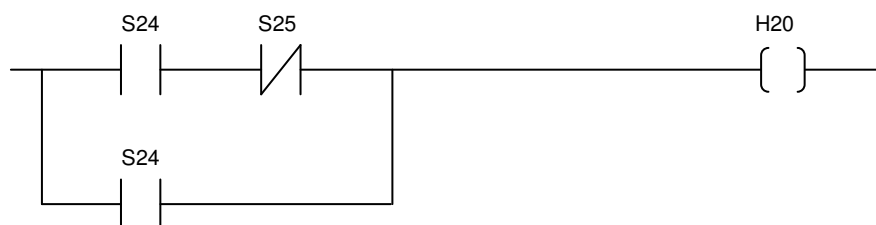
S26	S27	H20
0	0	0
0	1	1
1	0	1
1	1	0

$$22. H20 = (S24 + (S26 \bullet S27)) \bullet S25 + S26$$

S24	S25	S26	S27	H20
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
0	0	1	1	1
0	1	0	0	0
0	1	0	1	0
0	1	1	0	1
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

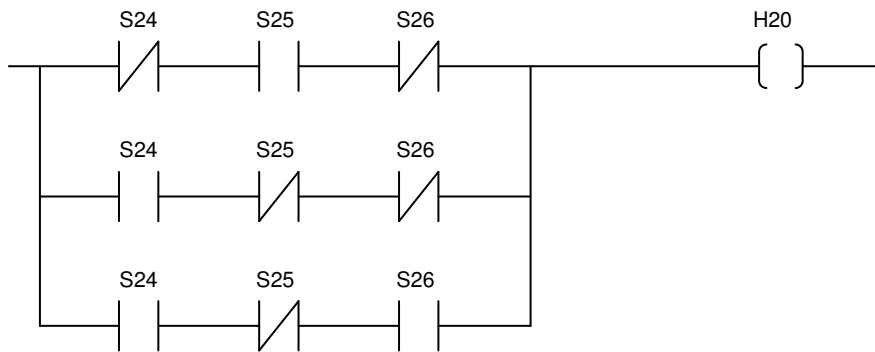
$$23. H20 = (S24 \bullet \overline{S25}) + S24$$

S24	S25	H20
0	0	0
0	1	0
1	0	1
1	1	1



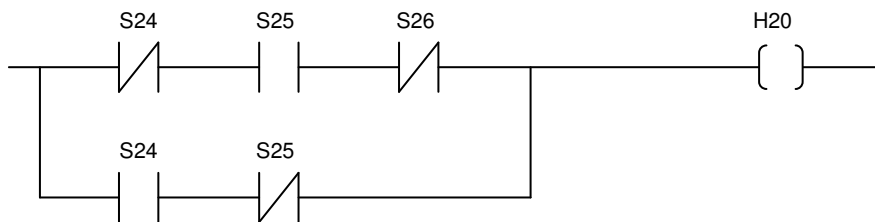
24. $H20 = (\overline{S24} \bullet S25 \bullet \overline{S26}) + (S24 \bullet \overline{S25} \bullet \overline{S26}) + (S24 \bullet \overline{S25} \bullet S26)$ S26 är N.O

S24	S25	S26	H20
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	0



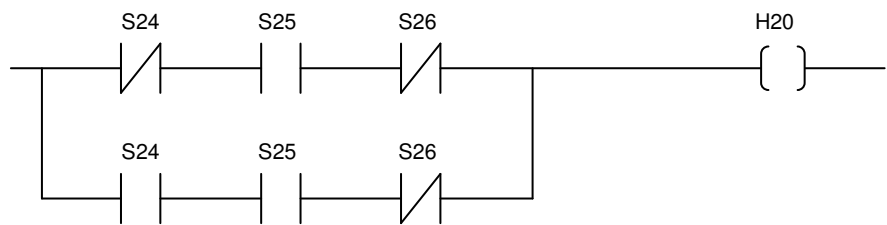
Förenklad

$$H20 = (\overline{S24} \bullet S25 \bullet \overline{S26}) + (S24 \bullet \overline{S25})$$



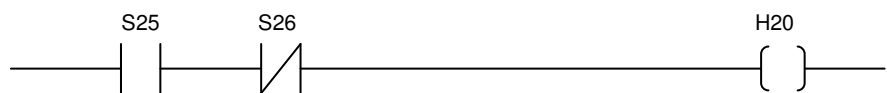
25. $H20 = (\overline{S24} \bullet S25 \bullet \overline{S26}) + (S24 \bullet S25 \bullet \overline{S26})$ S26 är N.O

S24	S25	S26	H20
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0



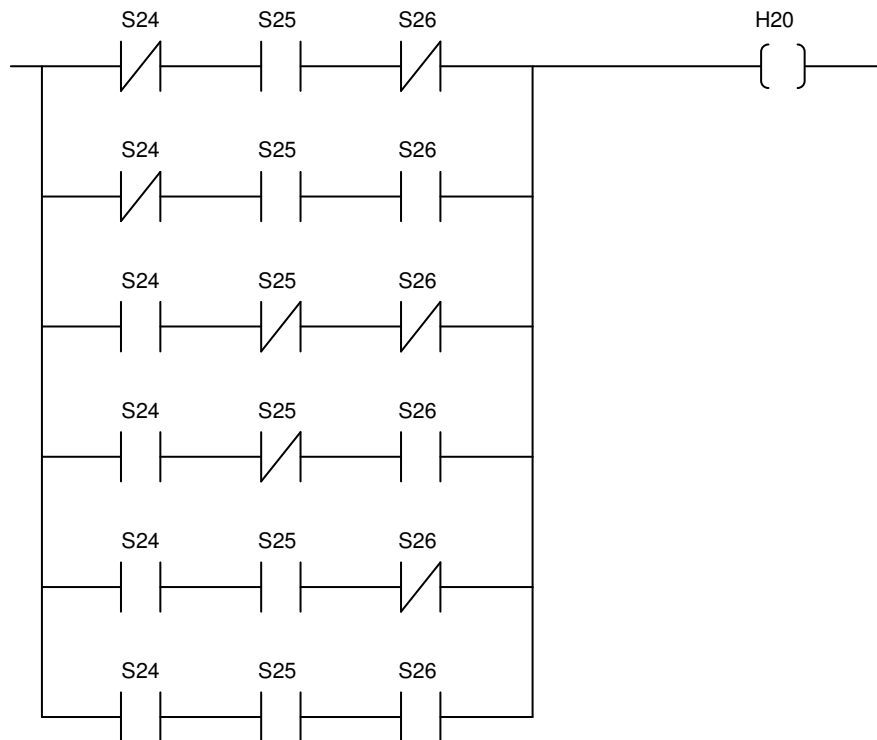
Förenklad

$$H20 = S25 \bullet \overline{S26}$$



26. $H20 = (\overline{S24} \cdot S25 \cdot \overline{S26}) + (\overline{S24} \cdot S25 \cdot S26) + (S24 \cdot \overline{S25} \cdot \overline{S26}) + (S24 \cdot \overline{S25} \cdot S26) + (S24 \cdot S25 \cdot \overline{S26}) + (S24 \cdot S25 \cdot S26)$ S26 är N.O

S24	S25	S26	H20
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1



Förenklad

$$H20 = S24 + S25$$

