

专业：人工智能

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1. 求如下子句集合的消解：

- a. $\{ [F(x, y), F(y, z)], [\neg F(u, f(u))] \}$
 - b. $\{ [F(x, x), \neg G(x, f(x))], [G(x, y), H(y, z)] \}$
 - c. $\{ [F(x, y), \neg F(x, x), G(x, f(x), z)], [\neg G(f(x), x, z), F(x, z)] \}$
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- a. $[F(f(u), z)], \{x/u\}\{y/f(u)\}$
 - b. $[F(x, x), H(f(x), z)], \{y/f(x)\}$
 - c. $[F(x, y), G(x, f(x), x), \neg G(f(x), x, x)]$

2. 令 $S = \{P(f(x)), Q(g(f(x), b), a)\}$ 。求 H_0, H_1 和 H_2 。

$$H_0 = \{a, b\}$$

$$H_1 = \{a, b, f(a), f(b), g(a, a), g(a, b), g(b, a), g(b, b)\}$$

$$H_2 = \{f(x) | x \in H_1\} \cup \{g(x_1, x_2) | x_1, x_2 \in H_1\} \cup H_1$$