```
library ieee;
use ieee.std logic 1164.all;
entity Q1 is
    port ( signal A, C, D, E, F : in std_logic;
         signal L : out std logic);
end;
architecture df1 of Q1 is
    signal B, H, K, G, I, J : std_logic;
begin
    B' <= not A;
    H \leftarrow B and C and D;
    G \leftarrow not F;
    I \leftarrow E \text{ or } G;
    J \leftarrow not I;
    K \leftarrow H \times J;
    L \le not K;
end architecture df1;
architecture df2 of Q1 is
begin
    L \leftarrow ((not A) and C and D) xor (not (E or (not F)));
end architecture df2;
```

