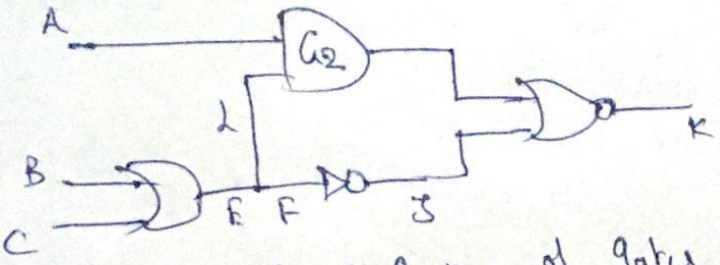
Example

Give Patterns $A = \{1, 1, 1, 0\}$; $B = \{0, 1, 0, 1\}$, $C = \{0, 0, U, 1\}$

and $K = \{0, 0, U, 1\}$



Sol To define Parallel Evaluation of gates from given Patterns.

Wkt :- If $A^0 = 1$ and $A^1 = 0$ then o/p is "0"

If $A^0 = 0$ and $A^1 = 1$ then o/p is "1"

If $A^0 = 0$ and $A^1 = 0$ then o/p is unknown (U)

∴ To define given Pattern then.

$A^0 = (0\ 0\ 0\ 1)$

$A^1 = (1\ 1\ 1\ 0)$

$A \Rightarrow \{1, 1, 1, 0\}$

$B^0 = (1\ 0\ 1\ 0)$

$B^1 = (0\ 1\ 0\ 1)$

$B \Rightarrow \{0, 1, 0, 1\}$

$C^0 = (0\ 0\ 0\ 1)$

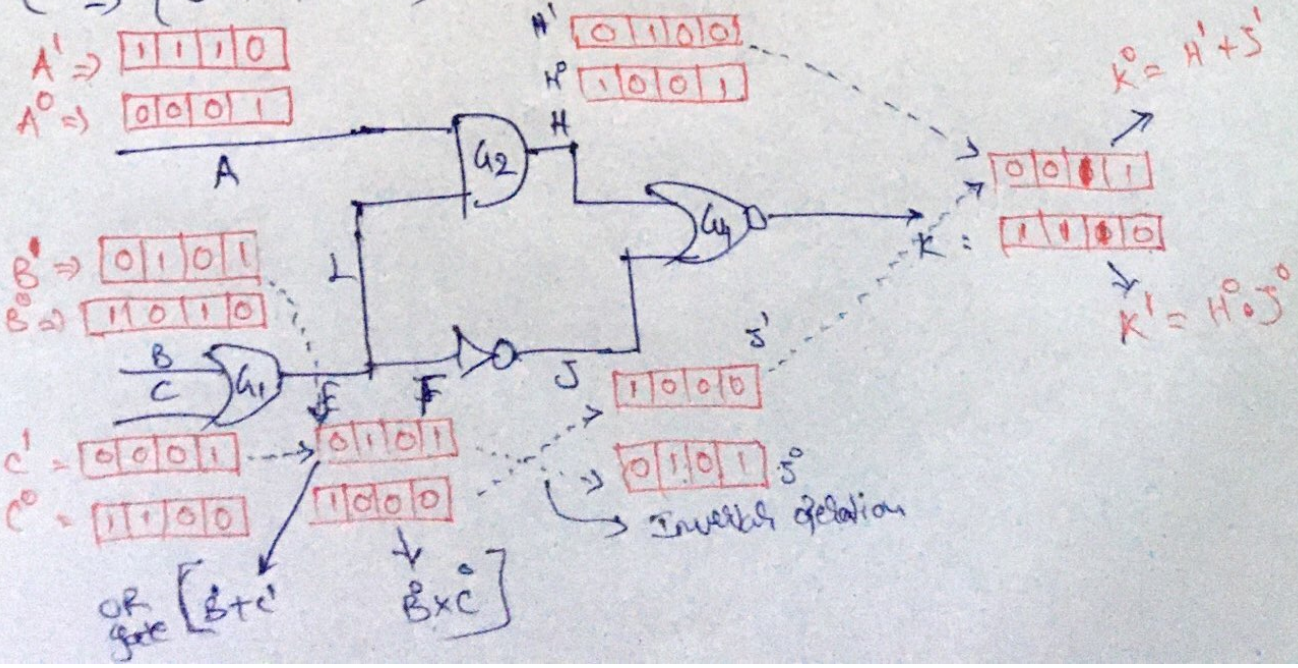
$C^1 = (1\ 1\ 0\ 0)$

$C \Rightarrow \{0, 0, U, 1\}$

$K^0 = (0\ 0\ 0\ 1)$

$K^1 = (1\ 1\ 0\ 0)$

$K = \{0, 0, U, 1\}$



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