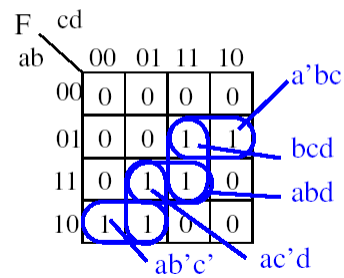


6.11 For the function $F(a, b, c, d) = ab'c' + abc'd + abcd + a'bcd + a'bcd'$, determine all prime implicants, and all essential prime implicants.



Prime implicants: $ab'c'$, $ac'd$, $a'bc$, bcd , abd
 Essential prime implicants: $ab'c'$, $a'bc$