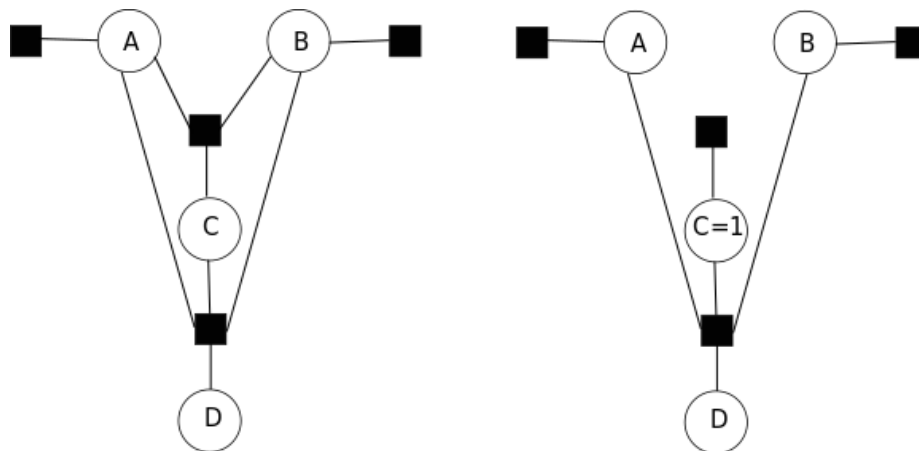


1 Sum-product Algorithm



The graph is now in tree structure, acyclic.

Table 1: f_A

A	B	C	D	f_A	f_B	f_C	f_D
1	1	1	1	1	1	1	1
0	0	1	0	0	0	0	1
1	0	1	0	1	0	1	1
0	1	1	0	0	1	1	0
0	0	1	1	0	0	0	0
1	1	1	0	0	0	0	0
1	0	1	1	0	0	0	0
0	1	1	1	0	0	0	0