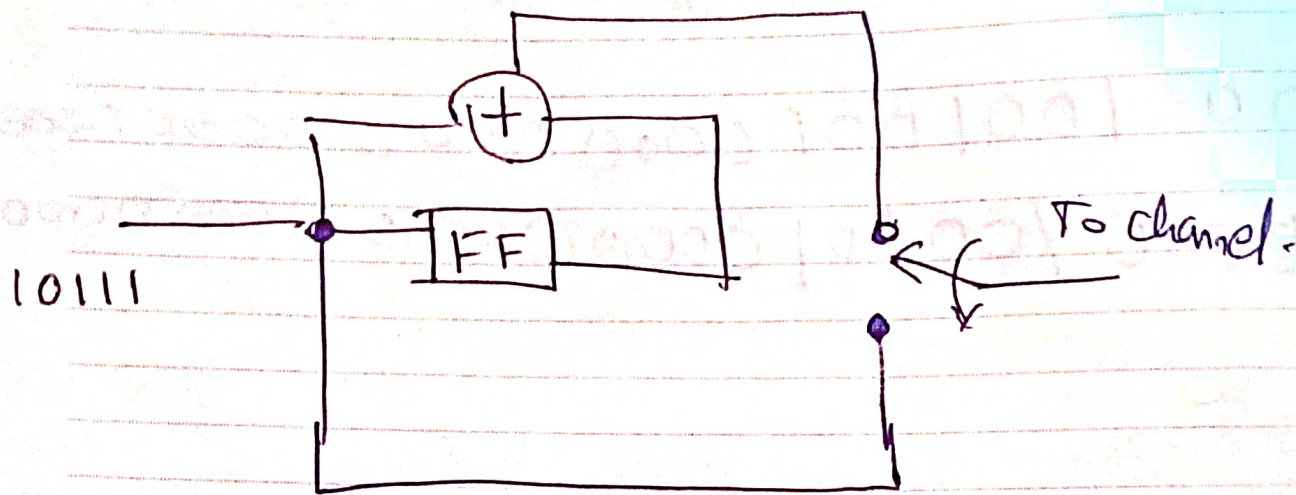


code tree



a) State diagram.

States = 2.

$S_0 \rightarrow 1$ & $S_1 \rightarrow 1$

Output

$$C^{(1)} = d_1 + d_{1-1}$$

$$C^{(2)} = d_1$$

State	Binary description	S/p	next state	Binary description	d_1	d_{1-1}	$C^{(1)}$	$C^{(2)}$
S_0	0	0	S_0	0	0	0	0	0
		1	S_1	1	1	0	1	1
S_1	1	0	S_0	0	0	1	1	0
		1	S_1	1	1	1	0	1

