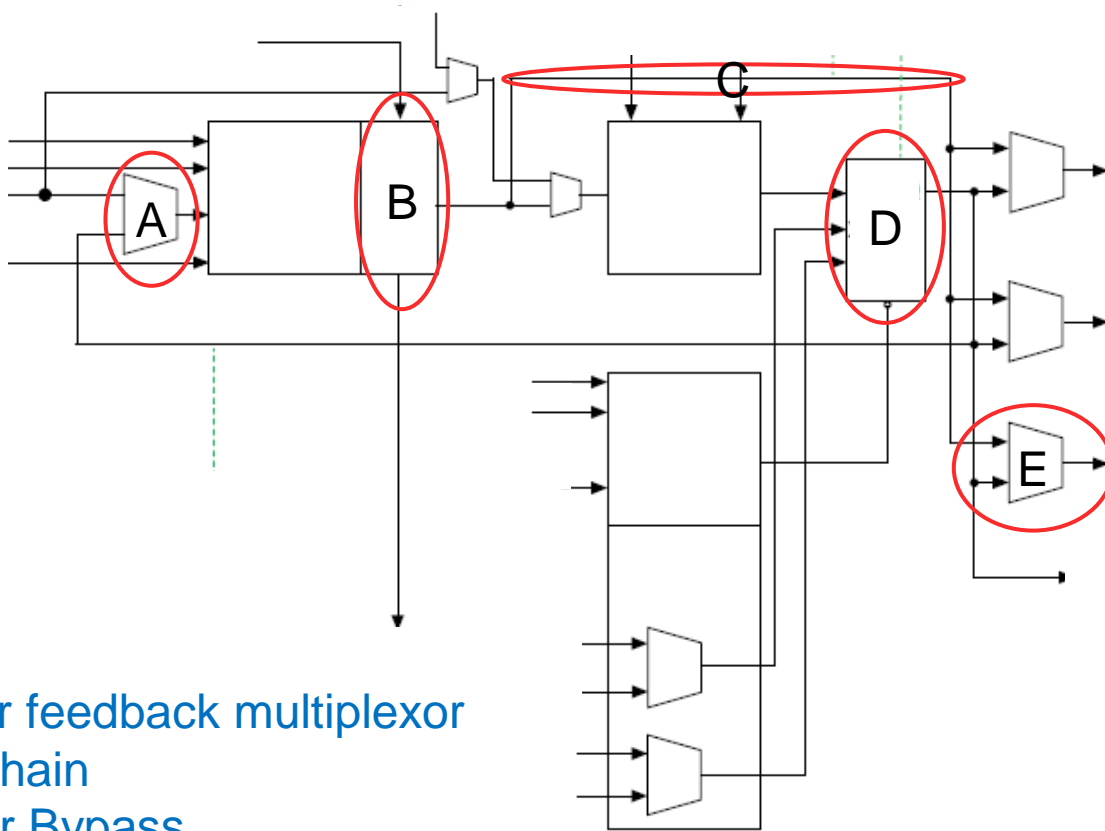


1 – Identify the purpose of each highlighted block

50 pts



A: Register feedback multiplexor

B: Carry Chain

C: Register Bypass

D: Register

E: Local routing multiplexor

2) Provide the hex value for the LUT Mask of a 4 input LUT with signals A,B,C,D tied to inputs 1,2,3,4 respectively when the compiled logic represents  
 $out = ((A+B) + (C\&D))$  50 pts

Inputs				E	F	OUT	
A	B	C	D	A+B	C D		E + F
0	0	0	0	0	0	0	b0
0	0	0	1	0	0	0	b1
0	0	1	0	0	0	0	b2
0	0	1	1	0	1	∞	b3
0	1	0	0	1	0	1	b4
0	1	0	1	1	0	1	b5
0	1	1	0	1	0	1	b6
0	1	1	1	1	0	1	b7
1	0	0	0	0	0	0	b8
1	0	0	1	1	0	1	b9
1	0	1	0	1	0	1	b10
1	0	1	1	1	0	1	b11
1	1	0	0	0	1	1	b12
1	1	0	1	1	1	1	b13
1	1	1	0	1	1	1	b14
1	1	1	1	1	1	1	b15

HEX  
0xFEEE

0xFFF8 if you did A B C D in truth table