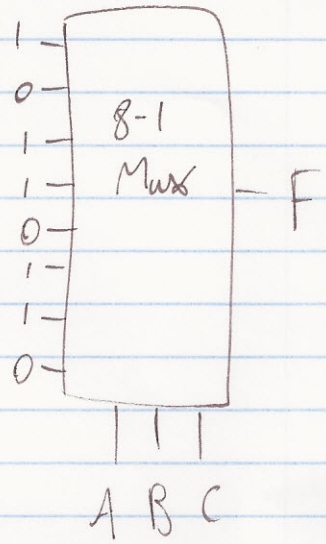
CS1110
Systems Organisation

25/11/2015

Implementing Functions Using A Mux

A	B	C	F
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	0



Can create any function using a Mux like above.
Not more efficient than working out the gates but it can be handier.

This was covered because he realised he forgot it when writing/reading the exam.

The Exam

He recommends 1 min/mark with 10 mins leftover

90 min, 80 marks, 4 questions, no calculator

Q1 (a)→(e) Number conversions between bases

Remember fast conversions between binary, octal, hex

marks	
4	(a) base → Bin, Hex, Dec, Oct
4	(b) Bin → base (not hex/oct/dec)
2	(c) Oct → Bin
4	(d) Hex → Bin, Oct
6	(e)
(2)	(i) ASCII (to/from); Number of bits in representation
(2)	(ii)
(2)	(iii)