Appendices

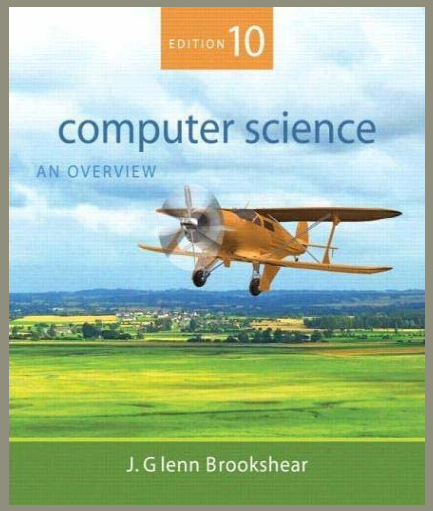
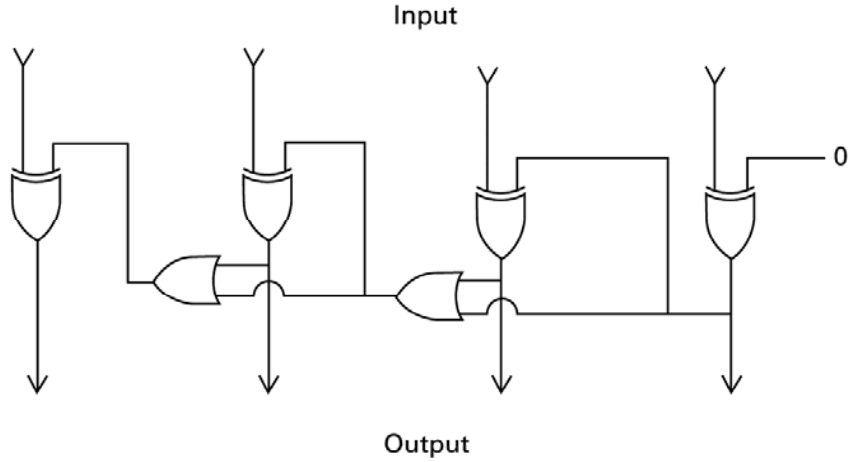


Figure B.1 A circuit that negates a two's complement pattern



Appendix A: Samples from ASCII

Symbol	ASCII	Symbol	ASCII
A	01000001	0	00110000
B	01000010	1	00110001
C	01000011	2	00110010
a	01100001	#	00100011
b	01100010	.	00101110
c	01100011	line feed	00001010

Figure B.2 A circuit to add a single column

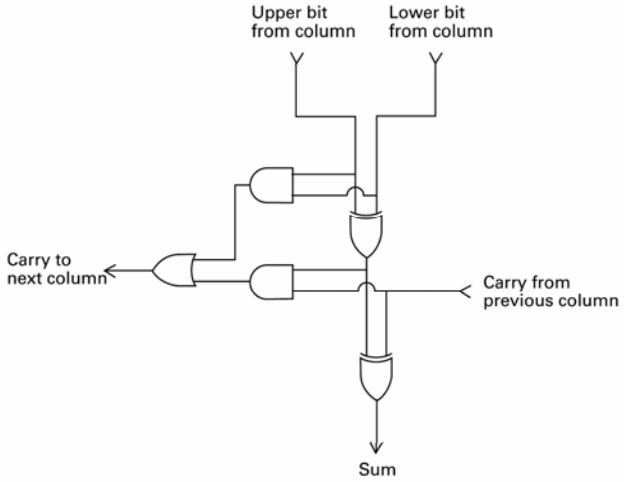
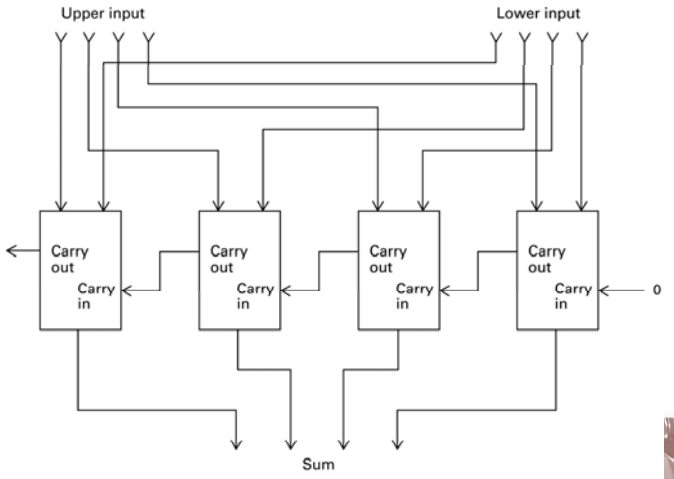


Figure B.3 A circuit for adding two's complement values



Appendix C: A Simple Machine Language

Op-code	Operand	Description
1	RXY	LOAD reg. R from cell XY.
2	RXY	LOAD reg. R with XY.
3	RXY	STORE reg. R at XY.
4	0RS	MOVE R to S.
5	RST	ADD S and T into R. (2's comp.)
6	RST	ADD S and T into R. (floating pt.)

Appendix C: A Simple Machine Language (continued)

Op-code	Operand	Description
7	RST	OR S and T into R.
8	RST	AND S and T into R.
9	RST	XOR S and T into R.
A	R0X	ROTATE reg. R X times.
B	RXY	JUMP to XY if R = reg. 0.
C	000	HALT.