## Digital System Design Project 2 – Exact Boolean Minimization

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## Case 1:

pla1.pla:

.i 4

.o 1

.ilb a b c d

.ob f

.p 4

0101 1

1101 1

0111 1

1111 -

.e

out1.pla

.i 4

.o 1

.ilb a b c d

.ob f

.p 1

-1-1 1

.e

cout

Total number of terms: 1 Total number of literals: 2

## Case 2:

Pla2.pla:

.i 5 .o 1

.ilb a b c d e

.ob f

.p 6

000-- -

001-- 1

011-- 1

100-- -

101-- 1

111-- 1

.e

Out2.pla

.i 5

.o 1

.ilb a b c d e

.ob f

.p 1

--1-- 1

cout

Total number of terms: 1

Total number of literals: 1

Case 3:		011110	0
Pla3.pla:		011111	1
.i 6		100000	-
.o 1		100001	0
.ilb a b c c	leg	100010	1
.ob f		100011	-
.p 64		100100	0
000000	0	100101	1
000001	1	100110	-
000010	-	100111	0
000011	0	101000	1
000100	1	101001	-
000101	-	101010	0
000110	0	101011	1
000111	1	101100	-
001000	-	101101	0
001001	0	101110	1
001010	1	101111	-
001011	-	110000	0
001100	0	110001	1
001101	1	110010	-
001110	-	110011	0
001111	0	110100	1
010000	1	110101	-
010001	-	110110	0
010010	0	110111	1
010011	1	111000	-
010100	-	111001	0
010101	0	111010	1
010110	1	111011	-
010111	-	111100	0
011000	0	111101	1
011001	1	111110	-
011010	-	111111	0
011011	0		
011100	1	.e	
011101	-		

Out3.pla		cout
	.i 6	
	.0 1	Total number of terms: 21
	.ilb a b c d e g	Total number of literals: 105
	.ob f	
	.p 21	
	000-01 1	
	00010- 1	
	0001-1 1	
	00-010 1	
	00-101 1	
	01000- 1	
	0100-1 1	
	0101-0 1	
	01-001 1	
	01-100 1	
	01-111 1	
	-00010 1	
	-00101 1	
	-01000 1	
	-01011 1	
	-01110 1	
	-10001 1	
	-10100 1	
	-10111 1	
	-11010 1	
	-11101 1	
	.e	