

# Notes

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## gray code algorithm in book

if the sum of digits is even, not the last digit. otherwise find the first one from the right and not the digit to it's left.

## work

11,12,13,15,18,19,20,21,23

## 11

**a**

00011100

**b**

01010101

**b**

00000010

## 12

**a**

$\{x_3, x_4, x_6, x_7\}$

**b**

$\{x_1, x_3, x_5, x_7\}$

**c**

$\{x_4, x_5, x_6, x_7\}$

## 13

00001 00010 00011 00100 00101 00110 01000 01001 01010 01011 01100 01101 01110 01111 10001 10010 10011  
10100 10101 10110 11000 11001 11010 11011 11100 11101 11110 11111

## 15

**a**

00010011→00010100

**b**

10101000→10101001

**c**

10111111→11000000

**d**

00000001→00000010

## 18

## 19

000  
110  
001  
010  
011  
100  
101  
111

## 20

000  
001  
101  
100  
110  
111  
011  
010

**21**

**a**

00000  
00001  
00011  
00010  
00110  
00111  
00101  
00100  
01100  
01101  
01111  
01110  
01010  
01011  
01001  
01000  
11000  
11001  
11011  
11010  
11110  
10101  
10100  
11100  
11101  
11111  
10111  
10110  
10010  
10011  
10001  
10000

**b**

00000  
00001  
00011

00010  
00110  
00111  
00101  
00100  
01100  
01101  
01111  
01110  
01010  
01011  
01001  
01000  
11000  
11001  
11011  
11010  
11110  
11111  
11101  
11100  
10100  
10101  
10111  
10110  
10010  
10011  
10001  
10000

## 23

**a**

010100110→010100111

**b**

110001100→110001101

**c**

111111111→111111101