2.1 Convert these binary to decimal

(a) 10110

(b) 10001101

(c) 100100001001

(d) 01011011

(e) 11111111

(f) 01110111

(g) 1111010111

(h) 10111111

2.2 Convert the following decimal to binary

(a) 37

(b) 14

(c) 189

(d) 1024

(e) 77

(f) 405

(g) 205

(h) 2313

(i) 511

2.3 What is the largest decimal value that can be represented by an 8-bit binary number? A 16-bit number?

2.6 Covert these Octal to binary

(a) 743

(b) 36

(c) 3777

(d) 2000

(e) 165

(f) 5

(g) 257

(h) 1204

2.7 Convert these binary to octal

(a) 10110

(b) 10001101

(c) 100100001001

(d) 01011011

(e) 11111111

(f) 01110111

(g) 1111010111

(h) 10111111

2.8 List octal sequence 165_8 to 200_8.

2.9 When a large decimal number is to be converted to binary, it is sometimes easier to convert it first to octal, and the from octal to binary. Try this procedure for 2313_{10} and compare it with the procedure used in 2.2e.

2.11 Covert these Hex to decimal

(a) 92

(b) 1A6

(c) 37FD

(d) ABCD

(e) 000F

(f) 55

(g) 2C0

(h) 7FF

2.12 Covert these decimal to hex

(a) 75

(b) 314

(c) 2048

(d) 14

(e) 7245

(f) 389

(g) 25619

(h) 4095

2.19 Encode these decimal in BCD

(a) 47

(b) 962

(c) 187

(d) 6727

(e) 13

(f) 888

(g) 42689627

(h) 1204