

a)

Level	Output of look-up table
8	1 1
7	1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1
6	1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1
5	1 1 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1
4	1 0 1 1 1 1 1 0 0 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 0 1
3	1 1 1 1 0 0 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 0 0 0 0 1 1 1 1
2	1 0 1 0 1 1 0 1 1 0 1 1 0 1 1 0 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 0 1
1	1 1 1 0 0 0 0 1 0 1 0 0 1 1 1 1 1 1 1 1 1 0 0 1 0 1 0 0 0 0 1 1 1
0	0 1 1 0 1 0 0 1 1 0 0 1 0 1 1 0 0 1 1 0 1 0 0 1 1 0 0 1 0 1 1 0
-1	0 0 0 1 1 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 1 1 0 1 0 1 1 1 1 0 0 0
-2	0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0
-3	0 0 0 0 1 1 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 1 1 1 0 0 0 0
-4	0 1 0 0 0 0 0 1 1 0 0 0 0 0 1 0 0 1 0 0 0 0 0 1 1 0 0 0 0 0 0 1 0
-5	0 0 0 1 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 1 0 0 0
-6	0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0 0
-7	0 0 0 0 0 0 1 0 1 0 0 0 0 0
-8	0 0

b)

Level	Output of look-up table
7.5	1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1
6.5	1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1
5.5	1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1
4.5	1 1 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 0 1 1
3.5	1 0 1 1 0 1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 0 1
2.5	1 0 1 1 0 0 1 1 1 1 0 1 1 1 1 0 0 1 1 0 1
1.5	1 0 1 0 1 0 1 0 1 1 1 1 0 1 0 1 0 1 0 1 0 1
0.5	0 1 0 1 1 1 1 1 0 0 0 0 0 1 1 1 1 1 0 1 0
0.5	1 0 1 0 0 0 0 1 1 1 1 1 1 0 0 0 0 1 0 1
-1.5	0 1 0 1 0 1 0 1 0 1 0 0 0 1 0 1 0 1 0 1 0
-2.5	0 1 0 0 1 1 0 0 0 1 0 0 0 1 1 0 0 1 0
-3.5	0 1 0 0 1 0 0 0 1 0 1 0 0 0 1 0 0 1 0
-4.5	0 0 1 0 1 0 0 0 0 1 0 0 0 0 1 0 1 0 0
-5.5	0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0
-6.5	0 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0
-7.5	0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0