PULSE CODE MODULATION

In pulse code modulation we need to sample and quantize the points.
Depending upon the number of bits in the encoded part the quantization varies.
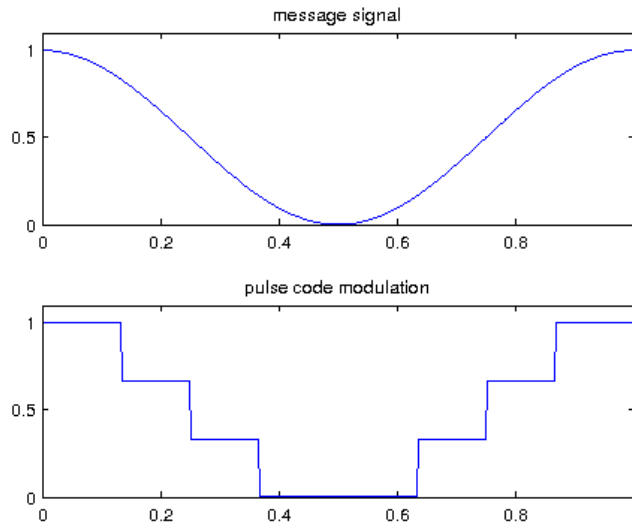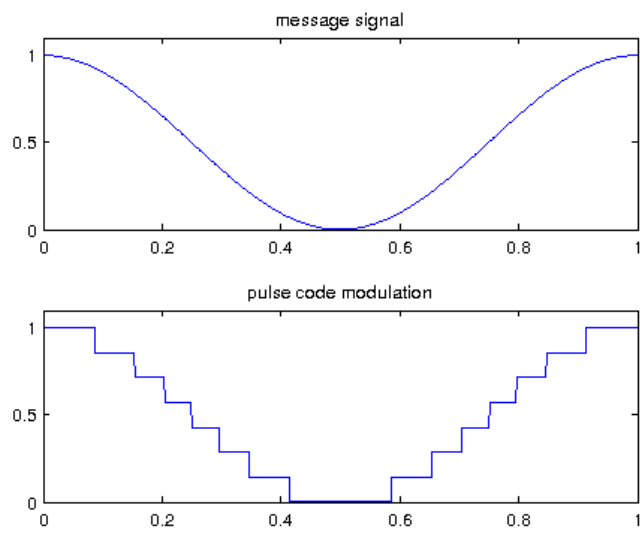The following are the plots at varying number of bits.

Figure 1: pulse code modulation with 2 bits

Figure 2: pulse code modulation with 3 bits