Q1.A 7-bit Hamming code is used to encode a 4-bit data word: 1011.

Calculate the parity bits and generate the 7-bit Hamming code.

1011  
2^r>=4+r+1  
2^0=1 r1

2^1=2 r2

2^2=4 r4

101r^31r^2r^1

1010101

