Q.2. Solution

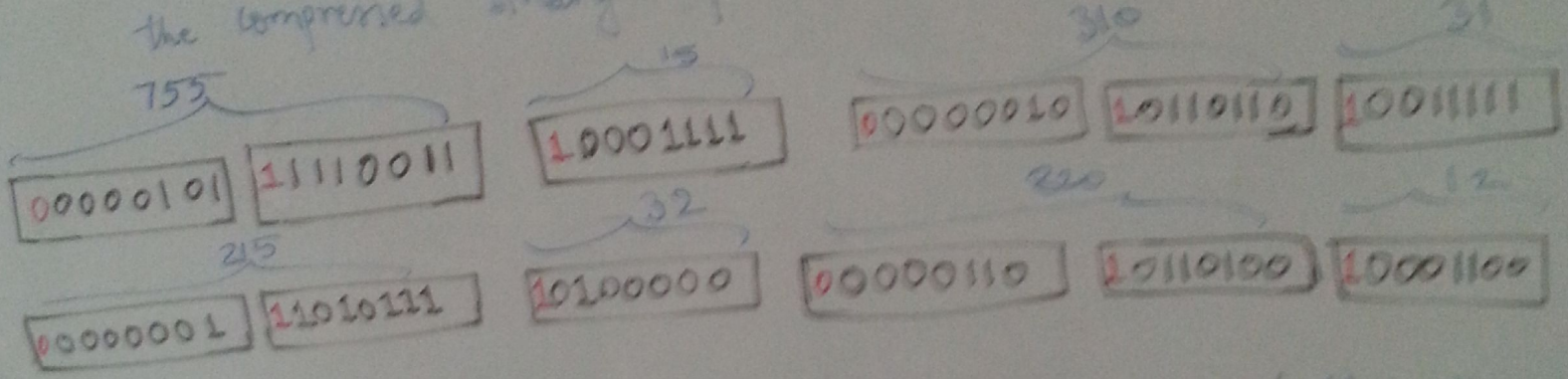
The given inverted index is -

(755, 15), (1065, 31), (1280, 32), (2100, 12)

Now, let's derive the d-gap as follows -

755 15 310 31 215 32 820 12

Now, let's use the VarInt method to generate the compressed binary representation as -



So, from above compressed representation of inverted indices, it only requires 12 bytes, whereas the original d-gap would take 24 bytes [(4+2) * 4 = 6*4 = 24 bytes].