**File Compression Using Huffman Encoding**



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**Huffman Coding Pseudocode**

Procedure HuffmanEncoding (PQ) //PQ is the priority Queue with Letters

      S = PQ.size // and Frequencies set it will be custom built

**while** S is not equal to 1 **do**

N = new Node ( )

N.left = PQ.pop

N.right = PQ.pop

           N.frequency = N.left.frequency + N.right.frequency

           PQ.Insert (N)

S = PQ.size

**end while**

**return**  PQ.Top

**Huffman Decoding Pseudocode**

Procedure HuffmanDecoding (root, in) //Root is the Huffman binary tree root and in is

current = root // the bit-stream to be decoded

**while** true **do**

bit = in.readBit()

**if** bit is equal to **0**

current = current.left

**if** bit is equal to **1**

current = current.right

**if** current.right equal to **NULL** OR current.left equal to **NULL**

break

**end while**

**return** current.data