CMSC 204

Huffman Lab

* Create a Huffman Tree and generate the codes for each character of the following input:

create a huffman tree

For consistency:

* If same frequency – put in priority queue alphabetically; put space before other characters of the same frequency
* Add subtrees to end of group with same priority
* Lower number has higher priority (goes to front)

c - 1

r - 2

e - 4

a - 3

h - 1

u - 1

f - 2

Space - 3

m - 1

n - 1

t - 2



Now encode “create a huffman tree”

* Based on the following Huffman tree and binary sequence, what is the text



1110011101101111111010001100010001100100

huffman tree

n - 000

r - 001

t - 010

u - 011

e - 100

f - 101

Space - 1100

a - 1101

h - 1110

m - 1111

1110 011 101 101 1111 1101 000 1100 010 001 100 100

h u f f m a n sp t r e e