Date: .....
Pg.no: .....

Huffman Coding

"Data Analytics and Intelligence Laboratory"

b g s c d o n y e i l n t a
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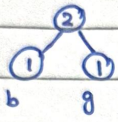

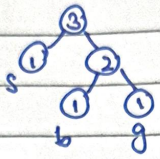

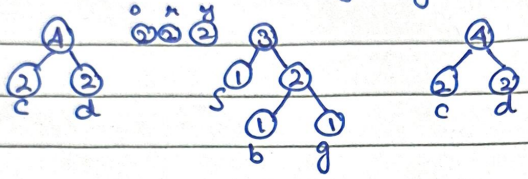

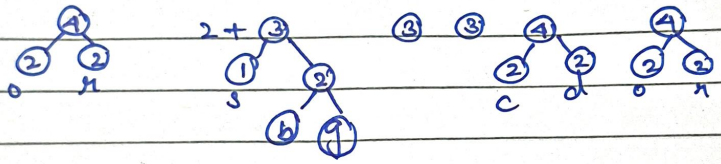

e i cd on l n t a
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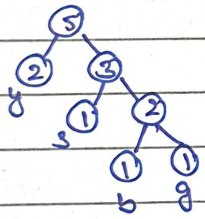

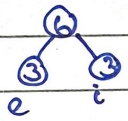

cd on l n t ysbg ei a
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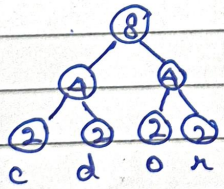

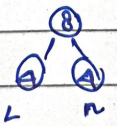

t ysbg ei a cdon
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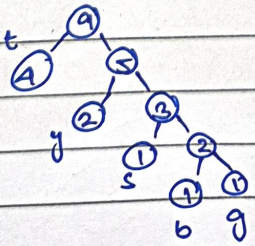

ei a cdon ln
6 7 8 8

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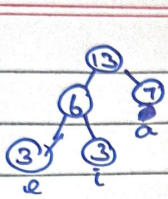
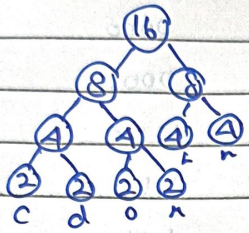


cdon Ln ysbg

8 8 9



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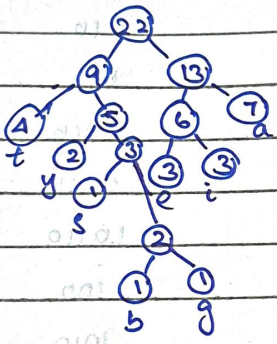
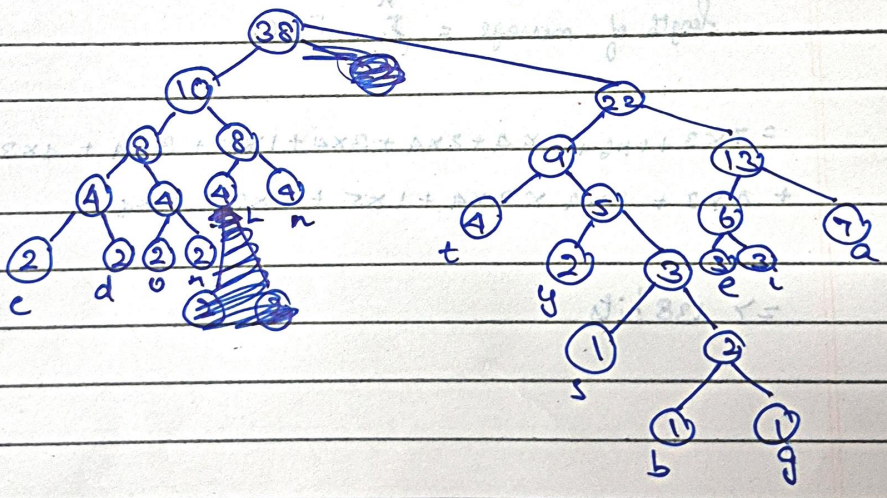


+ 16



Char	Freq	Code
A	7	111
B	1	101110
C	2	0000
D	2	0001
E	3	1100
G	1	11111
I	3	1101
L	4	010
N	4	011
O	2	0010
R	2	0011
S	1	10110
T	4	100
Y	2	1010

Length of message = $\sum_{i=0}^{n} F_i C_i$

$= 7\times3 + 1\times6 + 2\times4 + 2\times4 + 3\times4 + 1\times5 + 3\times4 + 4\times3 + 4\times3$
$+ 4\times3 + 2\times4 \times 2\times4 + 1\times5 + 4\times3 + 2\times4$

$\Rightarrow$ 138 bits