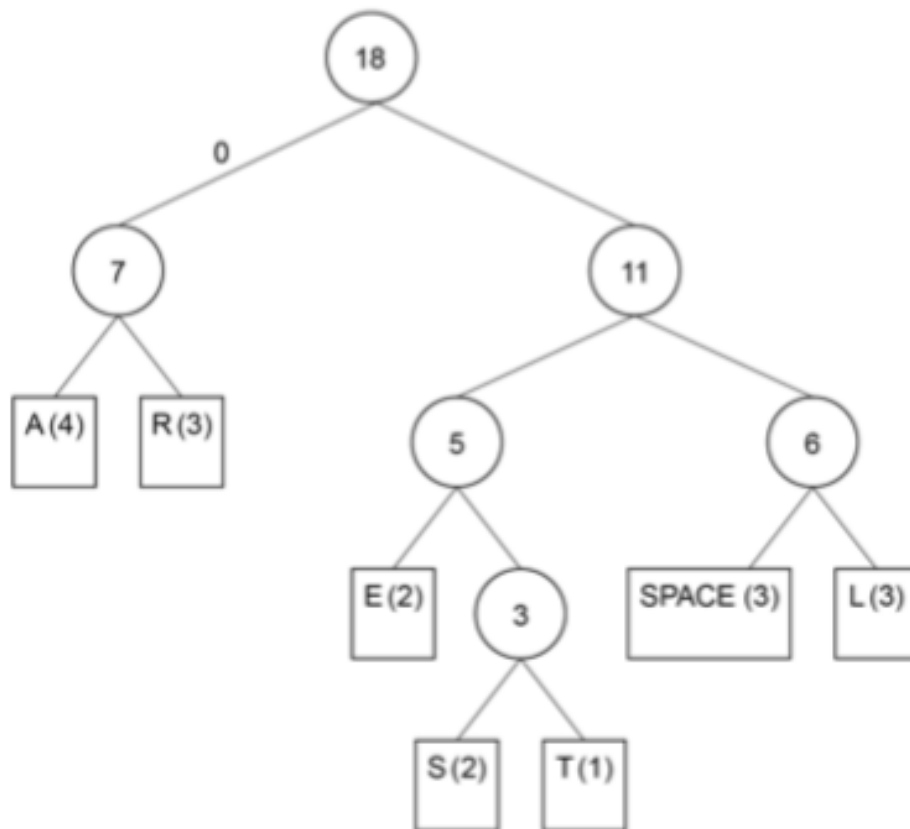


04 Huffman coding is a method of data compression used to compress text. The Huffman tree in **Figure 1** was created to encode the string ARE ALL STARS REAL

Figure 1



04.1 Part of the string ARE ALL STARS REAL was incorrectly encoded as Figure 2 below.

Figure 2

1111000010101011

What string does this encoding represent?

[1 mark]

L (111) E (100) A (00) S (1010) T (1011)

(no need to write the binary – that's to show you how it works – this is tricky...)

04.2 What would be the correct binary encoding for the substring STARS?

Write the correct encoding below the letters in the table

[2 marks]

S	T	A	R
1010	1011	00	01

All four correct = 2 marks / any 2 correct = 1 mark