The University of New South Wales
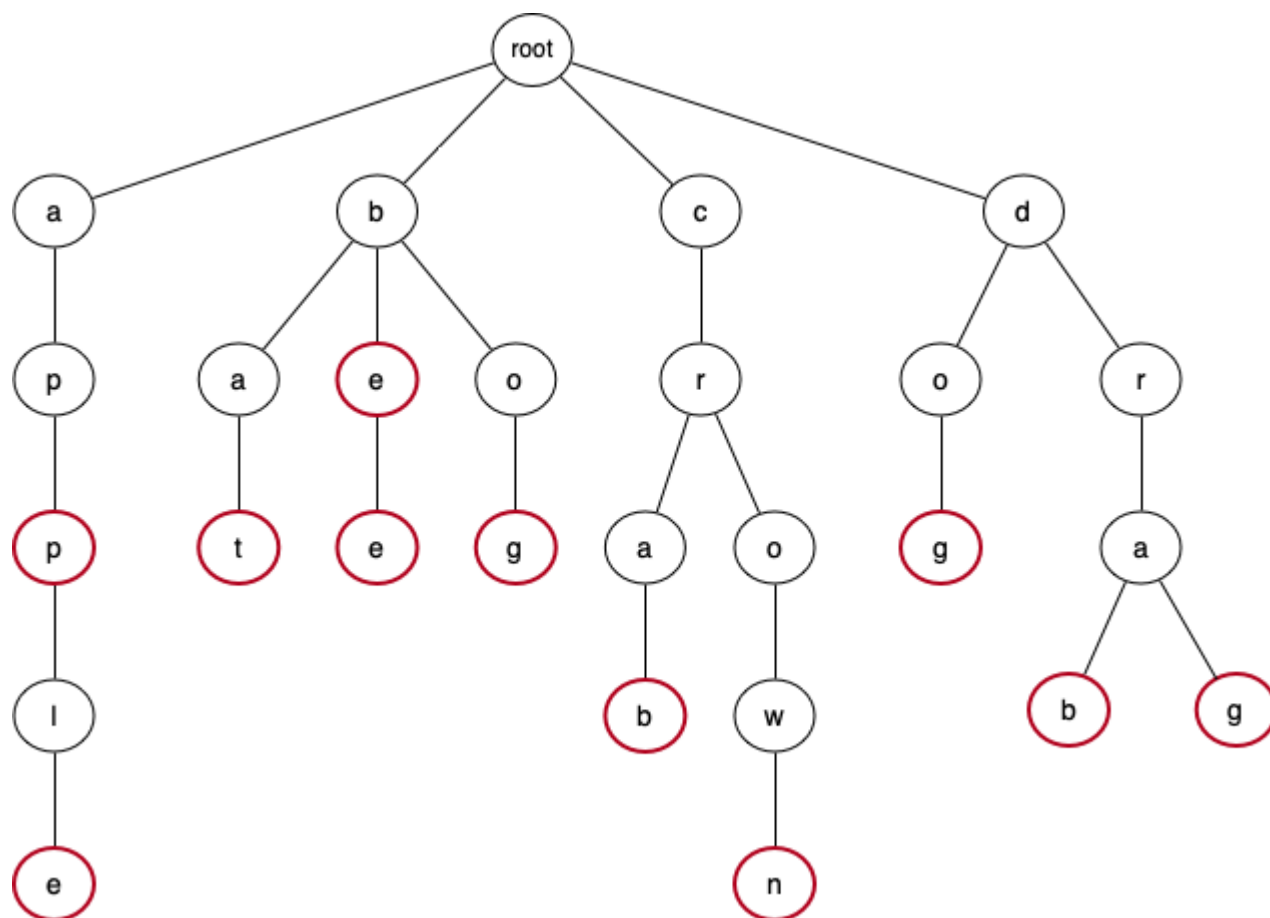# COMP2521 Data Structures & Algorithms
Final Exam

[Instructions] [Website] [C]
[Q1] [Q2] [Q3] [Q4] [Q5] [Q6] [Q7] **[Q8]**

Question 8 (5 marks)

Consider the following trie:

Finishing nodes are shown in **red**.

   a. how many words are stored in this trie?

   b. which nodes would be visited in searching for "`battle`"?
   (exclude the root node; write the letters in the order visited)

   c. which nodes would be visited in searching for "`deeds`"?
   (exclude the root node; write the letters in the order visited)

   d. how many *new* nodes would be added if the word "`bogus`" was added to the trie?
   (do not count nodes whose colour has changed; they are not *new* nodes)

   e. how many *new* nodes would be added if the word "`do`" was added to the trie?
   (do not count nodes whose colour has changed; they are not *new* nodes)

Instructions:

- Type your answer to this question into the file called `q8.txt`
- Submit via: **give cs2521 exam_q8 q8.txt**
  or via: Webcms3 > exams > Final Exam > Submit Q8 > Make Submission

End of Question