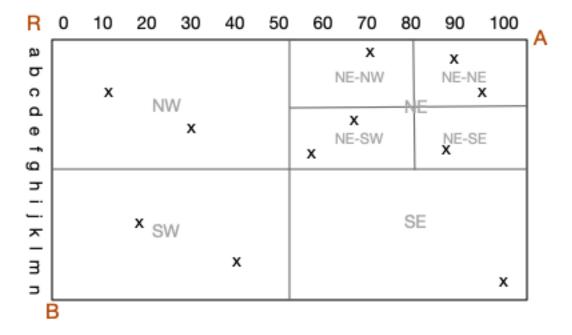
The University of New South Wales

COMP9315 DBMS Implementation Final Exam

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

Question 6 (3 marks)

Consider the following tuple space for a relation $\mathtt{T}(\mathtt{A},\mathtt{B})$ which has been indexed/partitioned by a quad-tree.



- a. How many nodes are in the quad-tree?
- b. If we ask the query select * from R where A > 40 and B < 'f', then which quadrants (and sub-quadrants and ...) would need to be examined?
- c. How many tuples (appearing as \mathbf{x} 's on the diagram) would be in the result set?

Show all working.

Instructions:

- Type your answer to this question into the file called q6.txt
- Submit via: **give cs9315 exam_q6 q6.txt** or via: Webcms3 > exams > Final Exam > Submit Q6 > Make Submission

End of Question