

ABSTRAK

Dalam suatu pohon pencarian biner dapat dilakukan suatu operasi operasi seperti menemukan suatu data, menemukan data minimum, maksimum, menentukan predecessor, successor, penyisipan dan penghapusan suatu data.

Operasi dasar pada suatu pohon pencarian biner memberikan waktu yang sebanding dengan tinggi pohon. Jika pohon mempunyai n simpul, operasi yang sama memberikan running time terburuk, $O(n)$. Pohon merah hitam merupakan salah satu bentuk pohon seimbang yang menjamin bahwa operasi dasar memberikan running time $O(\log n)$.

ABSTRAC

Binary search trees are data structures that support many operation including search, minimum, maximum, predecessor, successor, insert and delete. Thus, a search tree can be used both as dictionary and as a priority queue.

Basic operation on a binary search tree take time proportional to the height of tree. If the tree is a linear chain of n nodes, the same operation take worst case running time, $O(n)$. Red Black trees are one of many search tree schemes that are balanced in order to guarantee that basic operation take $O(\log n)$ time in worst case.