

$ZJUADS_cy2020_MidTermExam$

★ 当断题 10		
Making N insertions into an initally empty binomial queue takes $O(N)$ time in the worst case. (3分) \odot T \odot F		陈越 浙江大学
·2 In amortized analysis, a good potential function should always assume its minimum at the start of the sequence. (3分) T F 		陈越 浙江大学
·2 <mark>答案正确 (3 分) ② 创建提问</mark>		
In an AVL tree, it is possible to have this situation that the balance factors of a node and both of its children are all -1. (3分) T F	☆ 作者 単位	陈越 浙江大学
·3 <mark>答案正确</mark> (3分) ^Q 创建提问		
4 In a B+ tree, leaves and nonleaf nodes have some key values in common. (3分)	♀ 作者	陈越
	单位	浙江大学
·4 <mark>答案正确 (3 分) ② 创建提问 (3 分) (3 分) (3 分) (3 分) (4) (4) (4) (4) (4) (4) (4) (4 </mark>		
The Huffman code is one kind of optimal prefix codes. For a given alphabet and its characters' frequencies,the Huffman codes may not be unique, but the Huffman code length of each character is unique. (3分)	←	徐镜春 浙江大学
○ T ● F		
·5 <mark>答案正确 (3 分) ②</mark> 创建提问 ·6 To solve a problem by dynamic programming instead of recursions, the key approach is to store the results of		
computations for the subproblems so that we only have to compute each different subproblem once. Those solutions can be stored in an array or a hash table. (3分)	☆ 作者 単位	叶德仕 浙江大学
·6 <mark>答案正确 (3 分) ♀️ 创建提问</mark>		
7 In a Red-Black tree, the path from the root to the nearest leaf is no more than half as long as the path from the root to the farthest leaf. (3分)		陈越 浙江大
·7 <mark>答案正确 (3 分) ② 创建提问</mark>		
·8 When measuring the relevancy of the answer set, if the precision is low but the recall is high, it means that most of the relevant documents are retrieved, but too many irrelevant documents are returned as well. (3分)	☆ 作者 単位	陈越 浙江大学
8 <mark>答案正确 (3 分) ♀ ② 创建提问</mark>		
9 Finding the maximum key from a splay tree will result in a tree with its root having no left subtree. (3分) O T F	☆ 作者 単位	陈越 浙江大学
9 <mark>答案正确</mark> (3 分) ② 创建提问		
9 答案正确 (3 分) $\mathbb Q$ 创建提问 10 For the recurrence equation $T(N)=aT(N/b)+f(N)$, if $af(N/b)=f(N)$, then $T(N)=\Theta(f(N)log_bN)$. (3分) $\mathbb T$		陈越 浙江大学

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