Ekipler
Ödevler
Takvim
Aramalar
Dosyalar
...
Uygulamalar

4

We have only numeric keys and wishes to have a priority queue that is max-oriented. How could a min-oriented priority queue be used for such a purpose? *
(0/5 Puan)

5

Consider the following method:

```
public static void test_a(int n)
  {
    System.out.print(n + "-");
    n=n - 2;
    if (n>0)
      test_a(n % 10);
  }
```

What is printed by the call test_a(WITH YOUR STUDENT NUMBER)? (Note : % is the mode operator) *
(0/10 Puan)

Data Structures Final Exam (G20_CSE 201_Data Structures-1)

Kapat

2

Draw the 15-entry hash table that results from using the hash function, h(i) = (4i+7) mod 15, to hash the keys 16, 42, 19, 81, 27, 56, 71, 91, 12, 33, 25, 18, and 3, assuming collisions are handled by

a. Chaining
b. Linear probing
c. Double hashing using the secondary hash function h'(k) = 8−(k mod 8)?
d. Calculate load factor for final hast tables in a., b. and c. (Anonim olmayan soru) *

(10/20 Puan)

3

Write a recursive Java function that takes a five digit number s and outputs its reverse. For example, the reverse of '12345' would be '54321'. You can ask the user to enter the numbers one by one and your function can take an array where each digit are seperate. (Anonim olmayan soru) *

(20/20 Puan)

Data Structures Final Exam (G20_CSE 201_Data Structures-1)

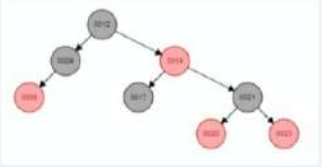
Kapat

8

Suppose removeMin is called on a priority queue that has exactly two entries with equal priority. How is the return value selected? *
(0/5 Puan)

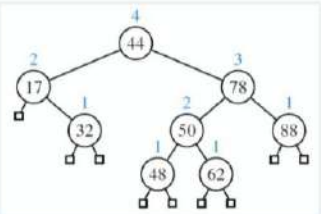
- This can never happen (violates the precondition)
- The one which was inserted most recently.
- The one which was inserted first. ✓
- One is chosen at random.

9



Current state of the Red-Black tree is as the figure. Draw the state after insert of 22.
(Anonim olmayan soru) *
(15/15 Puan)

1



Current state of the AVL tree is as shown in the figure. Draw the state after insert of 65.
(Anonim olmayan soru) *
(15/15 Puan)

AVLQ_MUSTAFA NUR KANLI.jpeg

2

Draw the 15-entry hash table that results from using the hash function, h(i) = (4i+7) mod 15, to hash the keys 16, 42, 19, 81, 27, 56, 71, 91, 12, 33, 25, 18, and 3, assuming collisions are handled by

a. Chaining
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Data Structures Final Exam (G20_CSE 201_Data Structures-I)

Kapat

6

(BONUS) Write an efficient algorithm to replace the value of node with a new value, in AVL-tree.
void replace(int value, int newValue) (Anonim olmayan soru)
(-/20 Puan)

7

I have implemented the queue with a linked list, keeping track of a front node and a rear node with two reference variables. Which of these reference variables will change during an insertion into an EMPTY queue? *
(0/10 Puan)

- (•) Only front changes.
- ( ) Only rear changes.
- ( ) Both change.
- ( ) Neither changes

8

Suppose removeMin is called on a priority queue that has exactly two entries with equal