Assignment #5: B-trees

10/19/2023

10/10 Points

Attempt 1

Review Feedback
10/19/2023

Attempt 1 Score:
10/10

View Feedback

Anonymous Grading: **no**

Unlimited Attempts Allowed

Details

Generate a sequence of N random integers (keys), in the range [0,...,3*N], with N >= 400. Then, build a 5-way B-tree using the randomly generated keys, in the sequence order. Then search for and return any keys in the range [N, 2*N].

Input: N
Output: (a) the tree; (b) array of keys found (empty array or null for no keys found)

Note: You can either generate the keys and then build the tree, or build the tree while generating the keys. You can represent the tree in any way you prefer (add corresponding note in ReadMe and comment in code)

Submit:

a single file, **X_Y_PA5.zip** or **X_Y_PA5.tar.gz**, where X is your first name (capital letters) and Y is your last name (capital letters). You get this file from compressing a folder named **X_Y_PA5** containing the following:

- Your code files (.cpp, .h, etc.)
- A Makefile file that contains all the commands needed to compile your code on **Tesla**. All the code will be tested on Tesla with its g++. I should be able to compile your code by executing **make**
- A **README.txt** file showing how the users should execute/run your program
- A screen recording of your compilation/execution

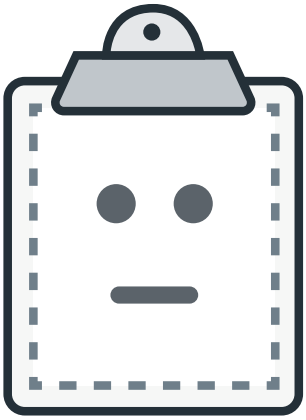
Point reduction:

-2pts for no automated generation of keys in the proper range

-4pts for no search

-1pts for N not being user defined (input)

-1pts for not submitting a screen recording



Preview Unavailable

PARMINDAR_SINGH_PA5.zip.zip

Download

(https://iu.instructure.com/files/163852593/download?download_frd=1&verifier=1SBWfKlPdIKHdZ4LhriknvJPi166Ypxre1k8ghzT)

You are unable to submit to this assignment as your enrollment in this course has been concluded.