Homework

- Extend the program of phone models management (PhoneDB) by implementing movetofront, transpose (and using counter if you can) strategies for feature Search & Update. Users can choose strategies and after the execution of the searching task, go back to the menu to display the Phone models list to check the effect of these strategies.

Homework

- Write a program that declares an array of at least 200000 integers (you can try with 500000 or 1 million integers). Initialize the array elements with ascending values. (For example a[i] = 2*i+3)
- The Program provides a menu for:
  - Sequential search
  - Sequential search using Sentinel
  - Binary search
- For each functionality, display not only the result but the execution time.

Homework

- Add the following helper functions to general binary tree data structure:
  - return the height of a binary tree.
  - return the number of leafs
  - return the number of internal nodes
  - count the number of right children.
- Use the library to create a binary tree and demonstrate the above functions.