Homework (Week 5)

P1.

Draw a binary tree T that simultaneously satisfies the following:

* Each internal node of T stores a single character.
* A preorder traversal of T yields EXAMFUN
* An inorder traversal of T yields MAFXUEN

Show what the constructed T’s postorder traversal yields.

A:MFAUXNE

M

F

3

1

N

U

A

X

E

5

2

8

4

6

P2.

Draw an example of a heap whose keys are all the odd numbers from 1 to 59 (with no repeats), such that the insertion of an entry with key 32 would cause up-heap bubbling to proceed all the way up to a child of the root (replacing that child’s key with 32).





