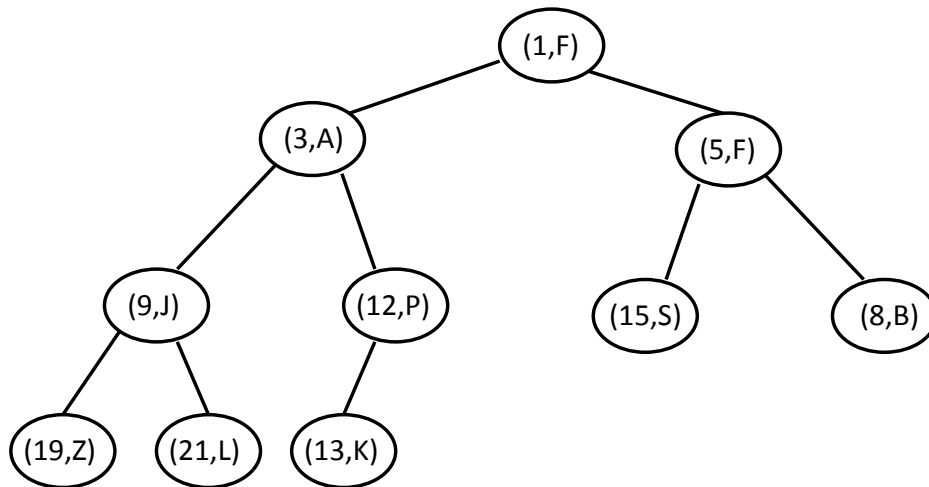


## Quiz 4

*Instructor: Sandy Irani*

1. Consider the heap ordered tree below. The items are (**key, value**) pairs, where the integer is the key and the letter is the value. The total ordering for the keys is the usual ordering of the integers. Suppose the items are stored in an array according to the array-based implementation of a heap discussed in class and in your text. Write a number next to each node of the tree indicating the index of the array where that entry is stored.



2. Suppose that a **removeMin()** operation is performed on the heap above. Fill in the tree below showing how the resulting heap looks after the operation is performed.

