Data Structures and Algorithms

Fibonacci Heap Union

The *union* function:

```
function union(a,b)     // a and b are non-empty heaps
    {
    h = new FibHeap();
    h.size = a.size + b.size;
    if (a.min.value < b.min.value)
        h.min = a.min;
    else
        h.min = b.min;
    h.rootList = append(a.rootList,b.rootList);
    }
```

The *union* function simply concatenates the donor heaps root lists and sets its minimum to the minimum of the donor heaps.

Next: Decreasing the value of an arbitrary node in a *Fibonacci* heap