Syntactic Zoom-Out / Zoom-In of Code with the Athenizer

Elegant Code

```java
public class HeapSort {
    private static int N;

    /* Function to swap largest element in heap */
    public static void maxheap(int[] arr[], int i) { 
        int left = 2 * i + 1, right = left + 1, max = left > N ||
            arr[left] <= arr[i] ? i : left;
        if ((right <= N && arr[right] > arr[max])
            max = right;
        if (max == i)
            return;
        swap(arr, i, max);
        maxheap(arr, max);
    }
}
```

Debuggable Code

```java
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            return;
        swap(arr, i, max);
        maxheap(arr, max);
    }
}
```

Spartan Code

- Focuses on minimalism
- Decreases code metrics: code size, control complexity, etc.
- Convenient for code distribution

The Spartanizer

- An Eclipse plugin
- Spartanizes code
- Composed out of 160 tippers – tiny refactoring operations

Athenian Code

- Verbose, presents the code in more extended way
- Increase code metrics: code size, control complexity, etc.
- Convenient for debugging of code and better understanding of it

The Athenizer

- Based on the Spartanizer Architecture
- Transforms code to be Athenian code
- Composed out of 30 bloaters – tiny refactoring operations

Architecture & Implementation

- Relies on the modular design of the Spartanizer
- Code analysis is done by AST library, offered as part of the JDT
- Uses binding information for more advanced refactoring techniques, in particular, for giving names to new variables
- Future research: meaningful names to new identifiers, a new axis of controlling over identifiers length

Get it Today!

- GitHub
- Eclipse-MarketPlace
- YouTube Demo

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