

LegoJenniferInstanceDistribution

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Aim

Examine the type of distribution which the frequency of the number of instances follows in java programs

Hypothesis

The distribution will be a power law

Method

1. HAT is used to obtain the number of instances in the hprof files of the following (found in /vol/elvis/HeapCorpus?):

```
Aglets.hprof Bloat.hprof  
AlgebraDB?.hprof Denim.hprof  
GJ.hprof HyperJ?.hprof  
JAX.hprof Kawa.hprof  
Satin.hprof SableCC?.hprof  
Soot.hprof Tomcat.hprof
```

2. It is calculated how many instances are created 0 times, how many created 1 time, how many created 2 times etc.

3. The results are all put into one datafile and MATLAB is used to determine the distribution.

Results

The datafile produces the following:

- The number of bins used in the diagnosis of logNormals: 10

Conclusion

According to the EVENTS RANKED BY FREQUENCY graph, the distribution may follow a power law.

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