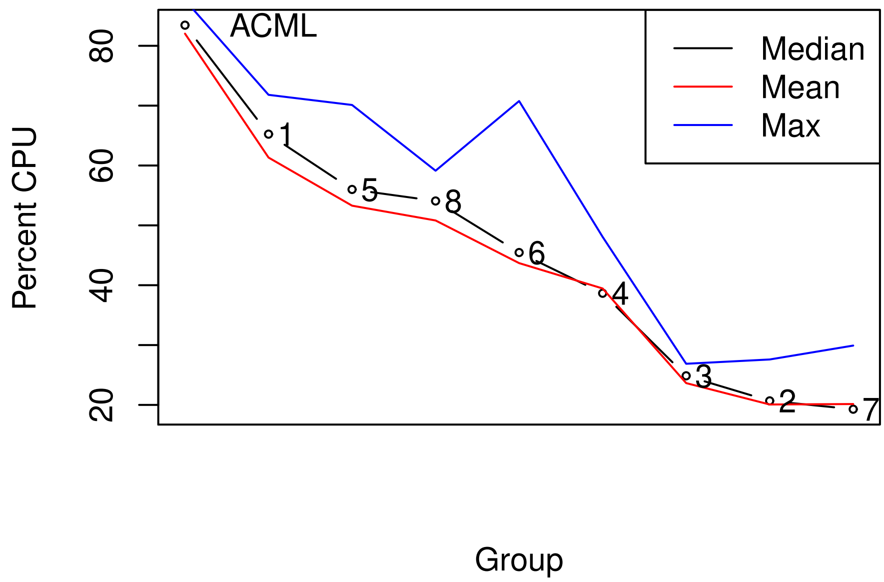
Results from first mandatory project

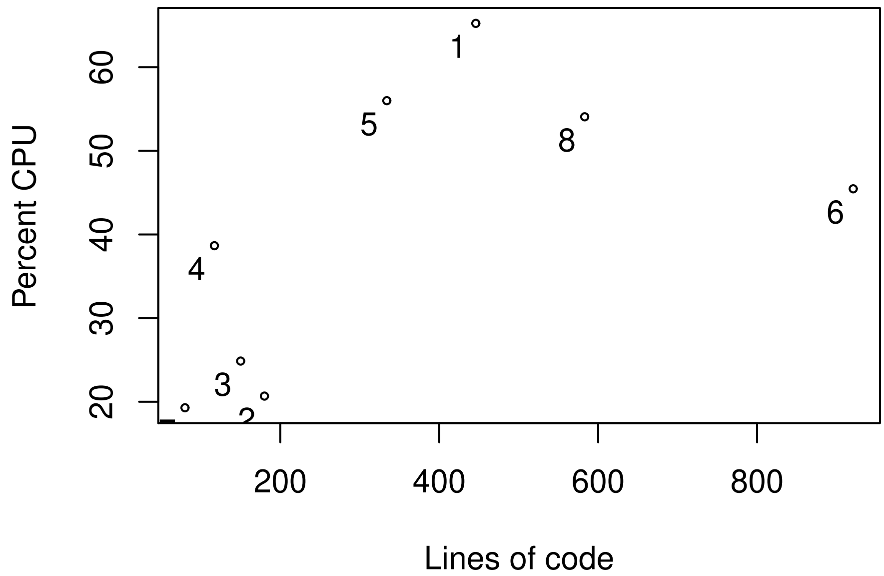
December 8, 2009

First we see the ladder of champions; the mean, median and maximum scores of each group has been calculated from trial runs of the programs and are placed here in order:



The numbering of the groups is arbitrary and done to preserve some anonymity. The most interesting is perhaps group 6, which manages to achieve great performance sometimes while the average case is mediocre.

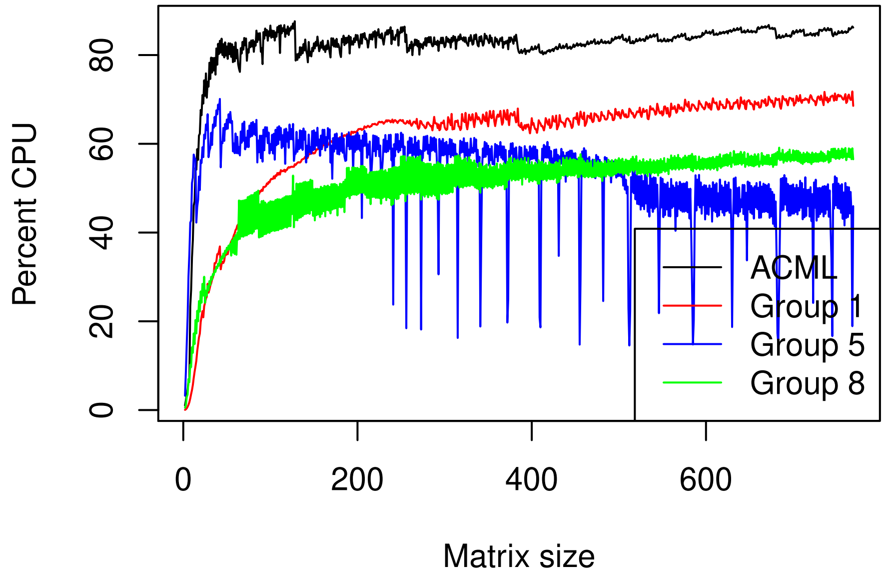
To illustrate how much coding has to be done to optimize CPU usage, the median numbers are plotted against the number of lines of code below:



From these results it would seem that some coding is necessary to help the CPU, but that it is possible to do too much as well, as we can see with group 6. Perhaps some of the explanation for the odd behavoiour is to be found here.

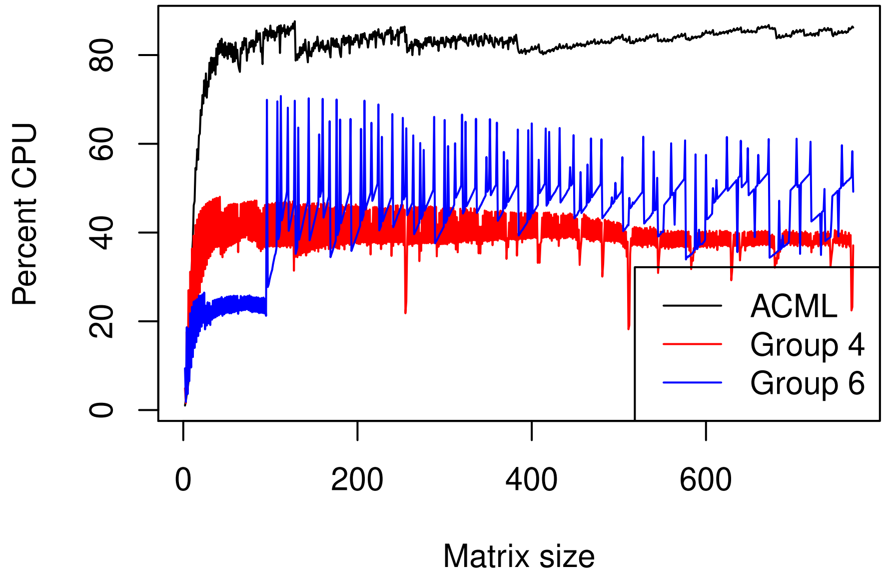
Note that the number of lines of code include comments, meaning they are ballpark figures only.

Lastly we have the actual results from the trial runs. First the best scores:



Congratulations for making reasonably good programs. It is noteworthy that all these programs used SSE-instructions well. This is absolutely vital.

Next we have the mediocre:



We can see that the behaviour of group 6's program is very strange compared to the rest (perhaps except group 2).

Finally we have the worst: