

COP4530 Data Structures, Algorithms and Generic Programming
Recitation 9
Date: 28th & 31st October and 2011

Lab topic:

- 1) **Take optional quiz**
- 2) **Learn to profile code using gprof**

^ **Profiling code using gprof**

1. When compiling the code, give gcc the following option: *-pg*.
2. Run the code as you normally would.
3. The following file will be created: *gmon.out*.
4. Analyze the results using gprof as follows: *gprof <name-of-executable>*.

● **Example:**

- 1 Copy the following files from *~cop4530/fall11/recitation/rect9* into your directory: *makefile, main.cpp, README*.
- 2 Compile *main.cpp* by typing: *make*.
- 3 Run the code as follows: *a.out*.
- 4 Analyze the code as follows: *gprof a.out*.
- 5 Can you figure out what the output from step #4 means?
- 6 Change *NITERS* in the code to 10000000 and see if the profile is significantly different.
- 7 Profile the code *test1.cpp*.

References

1. **gprof:** <http://www.cs.utah.edu/dept/old/texinfo/as/gprof.html>