

Parallel Programming

Laboratory 2

Steps:

1. Create a working directory(eg. Lab2).
2. Copy the file "[time.tar.gz](#)" to your working directory.
3. Extract the files: Makefile and the source code of the procedures for the time measurement: tmeas.c and the corresponding header file: tmeas.h.
4. Write a simple procedure in C containing
 - a) a loop that carries out an arithmetic operation
 - b) loop that carries out a simple output operation (printf)
5. Measure the time of execution of the loops
 - a) include the tmeas.h header file
 - b) call before the loop:
tstart();
 - c) call after the loop:
t=stop();
6. Modify the Makefile to allow compilation of your program using the time measurement procedures: add a commands for creating an executable file and intermediate file for your program.
7. Compile your program using "make" command
8. Run final program and measure the execution time of the loops

Making static libraries.

9. Create a static library with time measurement procedures: *ar rs libtmeas.a tmeas.o*
10. Create *lib* and *inc* directories in current directory and move there *tmeas.h* and *libtmeas.a* files.
11. Modify the Makefile to allow the use of the transferred library and header file: add options -I and -L to point to the location of moved files.
12. Clear the previous intermediate files with a "*make clean*" command.
13. Re-compile and execute.