HOW TO RUN PROGRAMMIN ASSIGNMENT 0 IN CMSC751/ENEE759K ON THE XMT MULTI LEVEL MACHINE

Level	Input file(s)	Instruction	Output File(s)
XMT C	<file name.c> xmtPreGcc.c xmtPostGcc.s	xmtpre gcc-cross xmtpost	xmtPreGcc.c xmtPostGcc.s xmtAssembly.txt
XMT Assembly	xmtAssembly.txt	xmtass	xmtAssembler.txt
XMT Assembler	xmtAssembler.txt	xmtasm	xmtBinary.txt
XMT ISA	xmtBinary.txt xmtData.txt	xmtsim	xmtPrint.txt xmtClockCycle.txt xmtNumberOfInstructions.txt

Remarks

1. Currently, the XMT Multi Level Machine requires two steps:
 Step 1: Run the XMT C level on glue (Unix).
 Step 2: For the remaining levels, you have two options, both rely on Windows.
    Option A: Running in the Jasmine Lab.
    Option B: Running on your home computer.
 Both steps are spelled out next:

Step 1: Compiling with XMT C on Glue

2. xmtpre, gcc-cross and xmtpost can be executed by using the xmtc script file.
3. xmtc, xmtpre and xmtpost are located in /afs/glue/class/enee/759k
4. Write your program for the compaction problem of size 8, based on a skeleton file compact.c located in /afs/glue/class/enee/759k/compact8 .
5. Write your program for the compaction problem of size 512, based on a skeleton file compact.c located in /afs/glue/class/enee/759k/compact512 .
6. You may copy only xmtc to your home directory on glue and run xmtc <file name.c>

Step 2, Option A: Compiling with XMT Assembly & Assembler and Running with xmtsim on Jasmine

7. Transfer xmtAssembly.txt from your home directory in glue to your desktop in Jasmine.
8. xmtass, xmtasm and xmtsim exec files can be executed by using the xmtsim batch file.

9. xmtass, xmtasm xmtsim exec files and xmtsim batch file are located in \\labs\759k
10. You may copy xmtass, xmtasm xmtsim exec files and xmtsim batch file to your desktop in Jasmine lab.
11. xmtData.txt is needed as an input to xmtsim. The xmtData.txt for the compaction problem of size 8 is located in \\labs\759k\compact8 . You may copy the file to your desktop in Jasmine lab as well.
12. The xmtData.txt for the compaction problem of size 512 is located in \\labs\759k\compact8512 . You may copy the file to your desktop in Jasmine lab as well.
13. Run xmtsim from your desktop in Jasmine. Your printing results are in xmtPrint.txt. The number of clock cycles during your execution are in xmtClockCycle.txt. The number of instructions during your execution are in xmtNumberOfInstructions.txt.
14. It is recommended to work from Jasmine with telnet and ftp to glue.

Step 2, Option B: Compiling with XMT Assembly & Assembler and Running with xmtsim at Home

15. Transfer xmtAssembly.txt from your home directory in glue to your desktop at home.
16. xmtass, xmtasm and xmtsim exec files can be executed by using the xmtsim batch file.
17. Go back to the class home page to download xmtass, xmtasm xmtsim exec files and xmtsim batch file.
18. xmtData.txt is needed as an input to xmtsim. Go back to the class home page to download xmtData8.txt for the compaction problem of size 8 and xmtData512.txt for the compaction problem of size 512.
19. Remember to rename whichever data file you are using to xmtData.txt.
20. Run xmtsim on your desktop at home. Your printing results are in xmtPrint.txt. The number of clock cycles during your execution are in xmtClockCycle.txt. The number of instructions during your execution are in xmtNumberOfInstructions.txt.
21. It is recommended to work from home with telnet and ftp to glue.
22. Make sure that Microsoft Visual Studio is installed on your machine.