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GTU Department of Computer Engineering
CSE312/CSE504 - Spring 2021
Homework 1 Report(README)

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1 System Requirements

In order to run spim you need to install followings;

- Flex and Bison.
- include exceptions.s fie to the "usr/share/spim" directory.

2 Running Spim

Note: I provide the makefile with source codes if you use it, it will compile both spim and shell.c file, therefore you don't have to use it.
Note: While creating shell.asm file **I didn't use online mips compiler** since it produces very complex mips assembly code which is difficult to deal with it. Instead, I created shell.asm file myself by converting C code line by line into mips assembly very carefully and by using create process syscall.

You can run shell based program in 3 different ways;

- Compile shell.c then run "./shell". After that write "./spim -file shellHelp.asm" and hit enter.
- run "./spim -file shell.asm" (mips assembly version of shell.c file).
- run "./spim -file shellHelp.asm" (helper file to run shell.asm in spim).

2.1 Running asm files in spim

In order to run .asm file by using my shell after doing one of above just type filename.asm For example; run "./spim -file shellHelp.asm" then type BubbleSort.asm

In order to create process **context switching** was made by using some memory handling codes from mem.cpp file in spim source code.

In order to stop shell just type **exit**.

A simple **test result** is following;

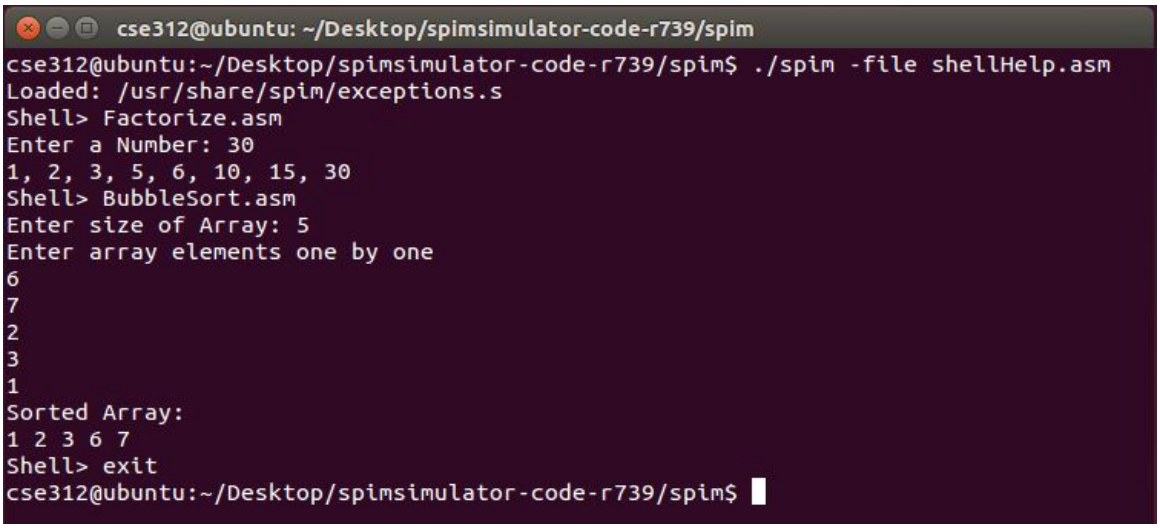

Figure 1