Lab 3 Guide

Your job will be to write both the user program augmented with the interrupt enabling code described above and the keyboard interrupt service routine.

User Program

The user program can be named as `user_program.asm` and will be in the form of:

```
.orig x3000
; initialize the stack pointer
...
; set up the keyboard interrupt vector table entry
...
; enable keyboard interrupts
...
; start of actual user program to print the checkerboard
...
.end
```

Interrupt Service Routine

The interrupt service routine can be named as `interrupt_service_routine.asm` and will be in the form of:

```
.orig x2000
; the code
...
RTI
; buffer space as required
...
.end
```

To test the program, we suggest you load the interrupt service routine first, and then the user program and execute finally.

Since your user program contains a infinite loop, to stop the program, you must press the "Stop execution" button in the simulator.