Hardware

Software

Device controller or
other system hardware
issues an interrupt

Save remainder of
process state
information

Processor finishes
execution of current
instruction

Process interrupt

Processor signals
acknowledgment
of interrupt

Restore process state
information

Processor pushes PSW
and PC onto control
stack

Restore old PSW
and PC

Processor loads new
PC value based on
interrupt

Figure 1.10 Simple Interrupt Processing