

1. A. Interrupts occur asynchronously as a result of signals from I/O devices that are external to the processor. Example : type characters from keyboard.
B. Traps are intentional exceptions that occur as a result of executing an instruction. Like system calls.
C. Faults result from error conditions that a handler might be able to correct. For example, page fault.
D. Aborts result from unrecoverable fatal errors, typically hardware errors. Such as parity errors that occur when DRAM or SRAM bits are corrupted.

2. A) x=4, x=3, x=2 B) x=2, x=4, x=3 C) x=4, x=2, x=3

3.

```
movl $7, %eax
movl $-1, %ebx
movl $0, %ecx
movl $0, %edx
int $0x80
```

```
movl $1, %eax
movl $0, %ebx
int $0x80
```

4. Running, Stopped and Terminated.

A running process becomes stop by receiving a signal such as SIGSTOP, SIGTSTP, SIGTTIN, or SIGTTOU.

A stopped process becomes running by receiving a SIGCONT signal.

A process becomes terminated:

1. Receiving a signal whose default action is to terminate the process.
2. Returning from the main routine.
3. Calling the exit function.