Give an example of 4 Program Error Signals, and explain the usage of each one.

1. **SIGFPE ­**- error signal that reports a fatal arithmetic error. It covers all arithmetic errors, for example division by zero.
2. **SIGILL** - signal error generated when a program tries to execute garbage or privileged instruction.
3. **SIGSEGV** - error signal that that is generated when a program tries to read or write outside the memory that is allocated for it or write memory that can only be read.
4. **SIGBUS** - error signal that is generated when an invalid pointer is dereferenced

Give an example of 4 Termination Signals, and explain the usage of each one.

1. **SIGTERM** - the generic signal to cause program termination, in other words is the polite way to ask a program to terminate.
2. **SIGINT** - a program interrupt signal which is sent when the user types the INTR character.
3. **SIGQUIT** - This signal is similar to SIGINT, except that is controlled by the QUIT character, it produces a core dump when it terminates.
4. **SIGKILL** –signal to cause immediate program termination, it cannot be handled or ignored.

What signal is impossible to handle and/or ignore? Why?

**SIGKILL** signal is impossible to handle and/or ignore because the kernel is the one that manages this signals and the program can’t handle it since it terminates execution.

Osvaldos-MacBook-Pro:~ osvaldo$ kill -INT 28008

Osvaldos-MacBook-Pro:~ osvaldo$ kill -QUIT 28008

Osvaldos-MacBook-Pro:~ osvaldo$ kill -TERM 28008

Doing Nothing ...

Termination Signal Handled!!

Doing Nothing ...

SIGQUIT signal handled!

Doing Nothing ...

 SIGTERM signal handled!

Doing Nothing ...

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Termination Signal Handled!!

Doing Nothing ...

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SIGQUIT signal handled!

Doing Nothing ...