DAC 0521 MET-N Writeup -Session 09

Calling Convention - It is a machine specific standard for supporting procedure calls between modules implemented in different programing languages. The Application Binary Interface (ABI) prescribed by Unix System V (GNU Linux, Oracle Solaris, IBM AIX, Apple macOS, Google Android, Apple iOS) specifies a calling convention which includes following register usage guidelines.

Usage	x64 Registers	a64 Registers
Integer/Pointer type Arguments	rdi, rsi, rdx, rcx, r8, r9	x0-x7
Integer type Return Value	rax	x0
Caller Saved Temporary Values	rax, rcx, rdx, rsi, rdi, r8-r11	x0-x15

Stack Frame - It is a portion of memory allocated to a procedure when it is called and released when this procedure returns. It is accessed using last-in-first-out model and is used for holding return address, passing additional arguments, restoring non-temporary registers and supporting local variables.