5 Steps:

1. Power On - > Power Supply
   1. Power supply to Mother boards
   2. Power supply to storage
   3. Power supply to hard disk
2. CPU loads BIOS and UEFI
   1. BIOS - Basic Input output system chip (used in old systems)
      1. Non-volatile chip
      2. Includes program for cpu initialisation
   2. UEFI - Unified extensible firmware interface (used in modern systems)
      1. Additional capabilities for managing computers connected on LAN
3. CPU Initialisation
4. Goes to a chip BIOS
5. BIOS or UEFi run tests and init hardware
6. Runs some Setting from memory area (backed by cmos battery)
7. Program loads with settings
8. Those program will POST -> Power on self-test (checks whether all hardware’s are present)
9. BIOS or UEFI, hands-off to the boot device
   1. Boot Devices - HDD or SSd, CD, USB Device
   2. Boot Loader- > when executed -> it On’s the actual OS

Where is boot loader present ->

1. MASTER BOOT RECORD(MBR) – Program starts from disks zeroth index - This is USED by BIOS
2. Extensible Firmware Interface(EFI) – Program is present in EFI. This is used by UEFI
3. Boot Loader load the full OS
   1. Program - > Actual OS Initialize
   2. Windows -> bootmgr.exe
   3. Mac -> boot.efi
   4. Linux -> GRUB