1. BIOS

When you power on your system, the first thing which fires up is the BIOS,

BIOS stands for Basic Input/Output System,

Performs some system integrity checks

Searches, loads, and executes the boot loader program.

So, in simple terms BIOS loads and executes the MBR boot loader.

2. MBR

MBR stands for Master Boot Record.

It is located in the 1st sector of the bootable disk.It contains information about GRUB

So, in simple terms MBR loads and executes the GRUB boot loader.

3. GRUB

GRUB stands for Grand Unified Bootloader.

If you have multiple kernel images installed on your system, you can choose which one to be executed.

GRUB has the knowledge of the filesystem.

So, in simple terms GRUB just loads and executes Kernel and initrd images.

4. Kernel

Kernel executes the /sbin/init program

5. init

init execute runlevel program.

there are 6 runlevels.

0 for halt

1 for single user mode

2 for multiuser mode withour nfs

3 for full multiuser mode

4 unused

5 grafical interface

6 for reboot