Linux Manual Partitioning

I) Partitioning for Legacy Boot + MBR Disk

1. You can create a maximum of 4 "primary" partitions on MBR Disk, the 5th partition will become unusable.
2. If you want to create more than 4 partitions, you need to use 1st 3 partitions as "primary" and rest as "logical".

Partition	Name	Optional	Mount	File System	Size	Type
/dev/sda1	BOOT	Yes	/boot	ext4	256 MB	Primary
/dev/sda2	ROOT	No	/	ext4	50 GB	Primary
/dev/sda3	SWAP	Yes	none	swap	4 GB	Primary
/dev/sda4	HOME	Yes		ext4	Remaining	Logical
/dev/sda5	DATA	Yes	/mnt/DATA	ext4/ntfs	Remaining	Logical

II) Partitioning for UEFI Boot + GPT Disk

1. You can create a maximum of 128 "primary" partitions on GPT, the 129th partition will become unusable.
2. If you want to create more than 128 partitions, you need to use 1st 127 partitions as "primary" and rest as "logical".

Partition	Name	Optional	Mount	File System	Size	Type
/dev/sda1	BOOT	No	/boot/efi	fat32	512 MB	Primary
/dev/sda2	ROOT	No	/	ext4	50 GB	Primary
/dev/sda3	SWAP	Yes	none	swap	4 GB	Primary
/dev/sda4	HOME	Yes		ext4	Remaining	Primary
/dev/sda5	DATA	Yes	/mnt/DATA	ext4/ntfs	Remaining	Primary

III) Partition Usage and Information:

Partition	Optional	Usage	Remarks
/boot	Yes	Bootloader, Kernels	Used in Legacy boot mode, MBR disk. You can set this to around 256 MB.
/boot/efi	No	Bootloader, Kernels	Used in UEFI boot mode, GPT disk. Some Linux distros need this partition to be at least 512 MB. Eg. Pop_OS
/	No	OS, Apps, Cache	Your system will fail to boot if the root partition gets filled up, so set it to at least 50GB.
swap	Yes	Temporary System Data	Setting a swap partition prevents the system from freezing when RAM is used up completely. Swap size should be equal to your RAM size if you use hibernate. Swap size should be half of your RAM size if you don't use hibernate. You need to tune the "vm.swappiness" parameter to make proper use of swap.
/home	Yes	User Data	This partition is used for storing application configuration files, cache of system, desktop environment and user applications. A separate /home partition will preserve user data and files when re-installing or changing OS.
/mnt/DATA	Yes	Secondary Data	This partition can be used for storing large files such as videos, pictures, softwares, ISO etc. Your secondary data will be preserved if you format root and home partitions.