**Operating Systems**

**Definition**:- It is an interface between user and hardware.

**Components of Operating system**:- There are two components:-

1.shell 2.kernel

i)Shell:- Shell is a command line interface.

1.Graphical user interface

2.Command line interface

3.Powershell🡪This is mostly used by Developers.

ii)Kernel:-The kernel is used to provide the intermediate path between

user and system. The user communicate with the system through

kernel because there is no direct interaction between user and system.

It is core of Operating system.

**Layers of OS**:- There are three layers in OS:-

1.Application

2.Operating system🡪shell, kernel.

3.Hardware

**Types of OS**:-There are two types:-

**1.Closed source operating system**

🡪the source code of operating system is totally closed source as it name itself says. We cant modify or edit the OS.

🡪It gives good support by the responsible dedicated team.

🡪The code is not available for public which is purchased by user.

🡪The windows is best example for Closed source OS.

2.Open source operating system.