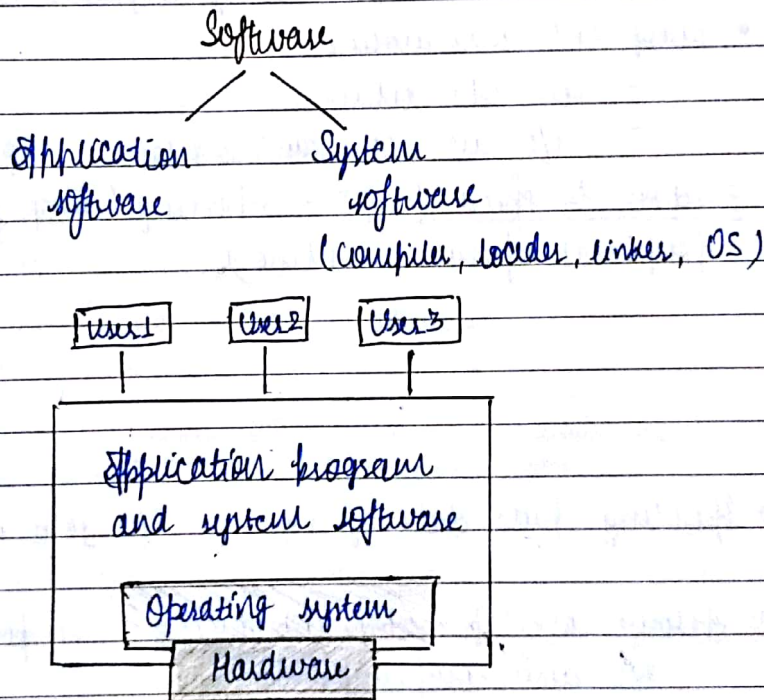Recommended books
- Operating system concepts — Silberscatz, Galvin, Gagne
- Modern operating system — A.S. Tannebaum
- Operating system — J.A. Harris

Computer — An electronic machine that performs operations on data. Calculator is a fixed program computing device.

Software — A set of programs that does some operations on a piece of data to solve a specific problem.

Software
├── Application software
└── System software
    (compiler, loader, linker, OS)

User1 User2 User3

Application program and system software

Operating system

Hardware

Bootstrap loader — It is a collection of programs that checks if hardware devices are in working order and responding, and loads important parts of operating system into the primary memory

Operating system • Resource allocator and manager
                 • It is a system program [software] that provides a bridge b/w application software and hardware, allocates memory for programs, handles interrupts and I/O devices and manages replacement of cache blocks and memory pages
                 • Resources — cpu time, memory, I0