

## **SOFTWARE CONCEPTS**

Software is a general term used to describe all the forms of programmes associated with the computer. Without software, a computer is like a car without petrol. Precisely, a software is nothing but a set of instructions that tell the computer what to do and when to do.

Softwares may be classified as:

1. Systems software
2. Application software
3. Languages

### **SYSTEMS SOFTWARE**

Systems software is a set of one or more programs, designed to control the operation of a computer system. These programs are general programs written to assist humans in the use of the computer system. In general, system softwares support the running of other software, communicate with peripheral devices (printers, card readers, disk and tape drives etc.) support the development of other types of software, monitor the use of various hardware resources (memory, peripherals, CPU etc) Thus systems software makes the operation of the computer system more effective and efficient. The programs included in a systems software are called systems programs.

Systems softwares offer several advantages and conveniences to application programmers and computer users in general. However, the production of systems software is a complex task that requires extensive knowledge in computer science. Because of its technical complexity, systems software is rarely developed in-house. They are normally developed and distributed by the computer manufacturers.

An especially important type of systems software is an operating system (OS). This is a highly complicated software that manages the resources of a

computer, i.e., system board, Disk storage, Printer, Keyboard, VDU etc. It reads commands from input devices like keyboard and the mouse, displays information on the screen and prints onto a printer. The operating system acts as an interface between the user and the computer (i.e., hardware) without an operating system, the computer is dead.

Examples of OS: MS-DOS developed by Microsoft corporation, UNIX, WINDOWS 95 etc.

**Some other examples of system softwares are:**

Translator (Assemblers, Compilers, Interpreters), Link editors, System libraries etc.

**APPLICATION SOFTWARE**

Application software, also known as application package, is a set of one or more programs designed to carry out operations for a specified application. A large variety of prewritten programs are available to solve specific tasks. Users need not prepare programs for such tasks. They should simply know how to use such prewritten programs. These prewritten programs for specific tasks are called application softwares.

Examples: wordstar for text manipulation, Lotus 1-2-3 for preparation of spreadsheets, dBase, Foxbase, Oracle etc. for handling database, softwares developed for specific purposes (i.e., for hospital administration, insurance, publishing etc.)