**Model – 1**

**1.What is Software**?

Software is a set of instructions, data, or programs used to operate a computer and execute specific tasks. In simpler terms, software tells a computer how to function. It’s a generic term used to refer to applications, scripts, and programs that run on devices such as PCs, mobile phones, tablets, and other smart devices. Software contrasts with hardware, which is the physical aspects of a computer that perform the work.

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Without software, most computers would be useless. For example, a web browser is a software application that allows users to access the internet. Without the web browser software, reading this page on Webopedia wouldn’t be possible. An operating system (OS) is a software program that serves as the interface between other applications and the hardware on a computer or mobile device. TCP/IP is built into all major operating systems to allow computers to communicate over long distance networks. Without the OS or the protocols built into it, it wouldn’t be possible to access a web browser.

**2.What are the types of Applications?**

Application Software is a type of computer program that performs specific functions. These functions, performed by application software, can be personal, business as well as educational. Thus, application Software is also known as end-user software or productivity software.

Application examples

Word processors.

Database programs.

Web browsers.

Deployment tools.

Image editors.

Apps are the foundation of the mobile economy. Since the arrival of the iPhone in 2007 and the App Store in 2008, apps have become the principal way users have tapped into the smartphone revolution. Applications have helped create a number of multi-billion dollar industries. For example, mobile games now generate over $30bn in revenue per year, while apps from social media companies such as Facebook massively contribute to their multi-billion dollar revenues each quarter.

**3.What is programing?**

Computer programming is a process that involves writing code that’s intended to perform a specific action on a software program, application, or computer. This code provides instructions on how the device should perform. A programmer’s job is to write these instructions, which involves creating and testing code the software program, app, or computer will use to operate successfully. In 1843, Charles Babbage and Ada Lovelace created the first programming language. In the time since, nearly 9,000 programming languages have been created.

1843: Ada Lovelace, English writer and mathematician, and daughter to Lord Byron, partnered with Charles Babbage to propose a mechanical computer called the Analytical Engine. At this time, she understood that machines could do more than perform calculations. She created and published the first machine-used algorithm and is remembered as the first Computer Programmer.

**4.What is Python?**

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics developed by Guido van Rossum. It was originally released in 1991. Designed to be easy as well as fun, the name "Python" is a nod to the British comedy group Monty Python. Python has a reputation as a beginner-friendly language, replacing Java as the most widely used introductory language because it handles much of the complexity for the user, allowing beginners to focus on fully grasping programming concepts rather than minute details.

Python has become one of the most popular programming languages in the world in recent years. It's used in everything from machine learning to building websites and software testing. It can be used by developers and non-developers alike.

Python is used for server-side web development, software development, mathematics, and system scripting, and is popular for Rapid Application Development and as a scripting or glue language to tie existing components because of its high-level, built-in data structures, dynamic typing, and dynamic binding. Program maintenance costs are reduced with Python due to the easily learned syntax and emphasis on readability. Additionally, Python's support of modules and packages facilitates modular programs and reuse of code. Python is an open source community language, so numerous independent programmers are continually building libraries and functionality for it.