Module 1

Q.1: What is Software?

Ans: Software is a collection of programs, data and instructions that tell a computer how to perform specific tasks or functions.

It is a set of electronic instructions that guide a computer's hardware components to execute various operations and tasks.

Software has many forms, like apps, OS, and more.

Q.2: What are the types of Applications?

Ans: Application software are categorized into several types based on their functionality:

1. **Word Processing Software**: The apps are used for creating, editing and formatting text-based documents.
2. **Spreadsheet Software**: This type of software are used for creating and manipulating numerical data In the form of tables.
3. **Presentation Software**: This type of software allows users to create slideshows for visual presentations.
4. **Database Software**: Database applications are used to store, organize and manage large volumes of data.

5. **Graphics and Image Editing Software**: This type of apps are used for creating, editing and manipulating digital images and graphics.
6. **Video Editing Software**: This type of software enable users to edit and manipulate video footage, add effects, transitions and create polished videos.

Q.3: What is programming?

Ans: Programming is also known as coding, is the process of writing instructions that a computer can understand and execute.

Programming languages are used as the medium through which humans communicate with computers.

It involves creating a set of logical and structured commands that tell a computer how to perform a specific task or set of tasks.

Programming is essential for developing software applications, websites, games and various other types of software.

Q.4: What is Python?

Ans: Python is a high-level programming language known for its simplicity, readability and versatility.

It was created by Guido van Rossu and first released in 1991.

Python's design philosophy emphasizes code readability and a clean syntax, which makes it an excellent choice for beginners and experienced developers alike.

Features and characteristics of Python are:

1. Readable and Expressive Syntax
2. Interpreted Language
3. Cross-Platform Compatibility
4. Extensive Standard Library
5. Large Community and Ecosystem
6. Versatility
7. Object-Oriented and Functional Programming
8. Dynamically Typed
9. Indentation-based Block Structure
10. Open Source