Module-1
Overview of IT Industry(Theory)

1. Explain in your own words what a program is and how it functions. What is Programming?

• What is a Program?

A **program** is a **set of instructions** written by a human that tells a computer what to do.

You can think of a program like a **recipe** for a computer:

- Just like a recipe tells a cook how to make a dish step by step,
- A program tells the computer how to solve a problem or complete a task.

 Example:
If you want your computer to **add two numbers**, the program will have steps like:

1. Ask the user for two numbers,
2. Add the numbers,
3. Show the answer on the screen.

• How Does a Program Work?

1. **You write the program** in a language the computer understands (like Python, Java, C++).
2. The computer **reads the instructions** from top to bottom.
3. It **follows each instruction** and performs actions like calculations, displaying messages, saving data, etc.
4. Finally, it gives you a result (like showing an answer or completing a task).

• What is Programming?

Programming means:

Writing the instructions (code) for a computer to follow.

So, a **programmer** tells the computer how to:

- Do math,
- Show messages,
- Take input from a user,
- Save data,
- And much more...

Programming lets you create:

- Apps
- Games
- Websites
- Software
- Robots, and even control machines!

Simple Example in Python:

```python
# A small program to add two numbers

num1 = int(input("Enter first number: "))
num2 = int(input("Enter second number: "))
sum = num1 + num2

print("The sum is:", sum)
```