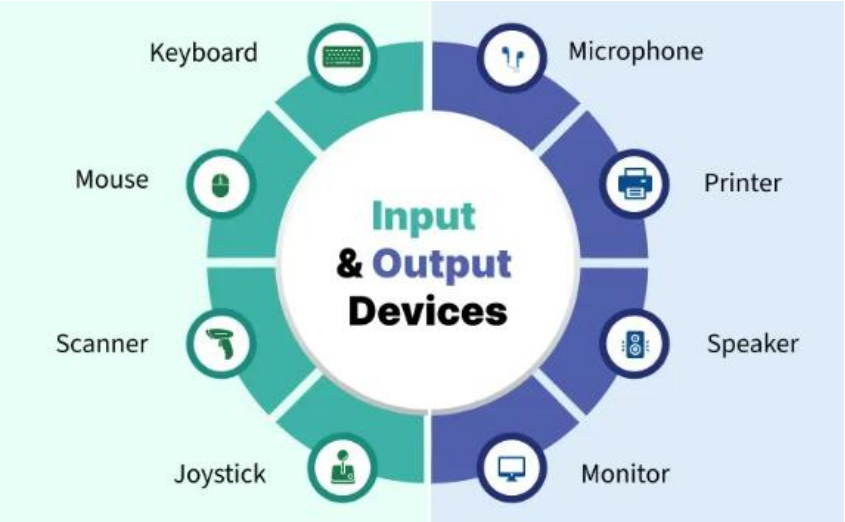
What are Input/Output (I/O) in a programming language?



In programming, **Input/Output (I/O)** refers to the communication between a computer program and the outside world. It's how a program **receives data (input)** and **sends data (output)**.

Think of a computer program like a chef in a kitchen:

- **Input (getting ingredients):** The chef needs ingredients to cook. These ingredients come from outside the kitchen.
    - You (the user) typing something on the keyboard (e.g., your name, a number, a command).
    - Reading data from a file on your computer's hard drive (e.g., a list of customers from an Excel file).
    - Receiving data from a network (e.g., fetching a web page from the internet).
    - Getting information from a sensor (e.g., a temperature reading).

- **Output (serving the dish):** Once the chef has prepared the dish, they need to present it or serve it. This is sending information out of the kitchen.
    - Displaying text or numbers on your computer screen (e.g., "Hello, John!", the result of a calculation).
    - Saving data to a file (e.g., writing a report to a text file, saving an image).
    - Sending data over a network (e.g., uploading a picture to a server, sending an email).
    - Controlling external devices (e.g., printing to a printer, making a robot move).

So, **Input/Output (I/O)** is simply the process by which a program interacts with anything outside of itself – whether it's a user, a file, another computer, or a physical device. It's how programs become useful by taking in information and providing results.