

Asynchronous programming is a programming model where tasks can run independently without blocking the main execution thread.

Instead of waiting for a long operation (like reading from a file, accessing a database, or making a network request) to finish before moving on, asynchronous programming allows the program to continue executing other tasks. Once the long operation is done, the program resumes from where it left off.

This approach improves **efficiency, responsiveness, and scalability**, especially in applications that need to handle many operations at once (like web servers or user interfaces).

In short: *Asynchronous programming lets a program do more work without being stuck waiting for slow tasks to finish.*