

Difference between Program, Process and Thread.

➤ **Program:**

A program is a set of instructions written in a programming language that resides on disk as an executable file. It is a passive entity, waiting to be executed.

➤ **Process:**

When a program is loaded into memory and executed, it becomes a process. A process is an instance of a program running on a computer. It has its own memory space and system resources allocated by the operating system.

➤ **Thread:**

A thread is a unit of execution within a process. A process can have one or more threads. Threads share the same memory space and resources within a process. They allow for concurrent execution of tasks, enabling multiple things to happen at the same time within a process.

In summary, a program is a set of instructions, a process is an active instance of a program with its allocated resources, and a thread is a unit of execution within a process that allows for concurrent tasks.