**Multithreading**

**Program : Set of instruction to perform specific task.**

**Process : Process takes some time (t time ) to execute the code. Program in execution.**

**Processor : processor is responsible to execute the code.**

**Thread : Thread is small execution of a code within a process. Thread also known as light weighted process.**

**Java is by default thread based programming language. Inside a main method always one default thread is running.**

**Thread t = Thread.currentThread();**

**System.out.println(t); thread group, priority and name of thread**

**Thread is a pre defined class part of lang package which contains set of methods . currentThread is statc method which provide current thread details. currentThread method return type is thread class reference.**

**Multitasking :**

**We can achieve multi tasking using**

**process base**

**thread base process 2 min**

**Task1 Task2 Task3**

**10 min 10 min 10 min**

**In java we can crate more than one thread using different ways.**

1. **Extends Thread class**
2. **Implements Runnable interface**

**Runnable interface contains run method. which class implements Runnable interface we need to override run method mandatory. But when class extends Thread class not required(optional)**

**Thread life cycle**

**Create ----🡪 Ready to run --🡪 Running ---🡪Destroy**

**runnable state**