**FUNCTIONAL PROGRAMMING**

Based on lamda calculus

* Stateless : same input🡪 same output referential transparency, absence of memory.

No variables , no Assignments , no loops.

**Parallelism**

* Base on Composition of communication
* Even in parallel
* Communication only through return values
* No race condition, no need to synchronize/

**Interfaces**

1. Static methods

* Interfaces can have public static final fields
* In Java 9 , they can have public static methods
* Interfaces can have default methods
* Interfaces still stateless unlike abstract as they have instance fields and behavior.

**Functional Interface**

* Any interface with a single abstract method
* Static and default methods allowed
* To be implemented by stateless classes **NO INSTANCE FIELDS**
* **@FunctionalInterface** Annotation checks for single abstract method property

**Lamda Expression**

**parameters ->body**

**Type Inference**

Mechanism used by compiler to inference a type that is not specified