Why lambda expression introduced

Another way of writing instances of anonymous classes and to make the code more concise and compact, readable

Type of lambda expression? – a functional interface

Can lambda be put in a variable? – yes

Is a lambda expression an object?

Ans is No but it’s not a clear no because infact, lambda expression is still recording object inside JVM. It is a new kind of object in java8 Lambda expression can be used around the code as a piece of code but not as an object that we can call methods on.

Functional Interface in java 8

Interface with only one abstract method is called as functional interface

Eg :

Default methods in java 8

It allows to change the old interfaces without breaking the existing implementations.(eg: adding forEach() as default method in Iterable interface in java8).

It allows new patterns.

java 8 supports static methods in interfaces.

Why forEach() added as default method to the existing interface Iterable instead of creating new interface for it?

The Iterable interface is the root interface for all the collection types that are meant to be iterated over in java(like List, Set etc). By adding forEach() to Iterable, java ensures that all the classes that implement Iterable can be used with the new functional style of iteration.

By adding forEach() to the existing Iterable interface, java ensures backward compatibility. Code that used iterable interface prior to java 8 continues to work without modification. Collections and other types that implement Iterable(even custom ones) automatically inherit forEach() method, making it seamless to adopt new API.

What is Stream in java 8?

Stream is nothing but an java type interface and the type is T. means we can have the type as stream of integers, stream of persons,streams of strings etc,

It can efficiently process the large amounts of data in parallel means to leverage the computing power of the multi core CPU’s.

It’s an object which doesn’t allow to modify the data in it. It only processes the data.