AGENDA:

Lambda and Streams

1> Functional Interfaces

2> Lambda

3> Streams → map
→ filter

INTERFACE

container for abstract methods.

```
public interface fun {

    void a();
    void b();

}
```

Q1: Can interfaces only hold abstract methods?

Before Java 8 → YES

default methods are now allowed

Functional Interface:

Interface with SINGLE ABSTRACT METHOD

↓

{ It can have default methods }

```
interface {

    void fun1();
    default fun2()..
    default fun3()

}
```

← Only single abstract method

Can I add more methods to this interface?

↓

Yes.

@FunctionalInterface ←

- not mandatory but good to have
- compile time check to make sure interface only has a single abstract method

Have you ever worked with functional interfaces ?

1) Runnable ← run()
2) Callable ← call()
3) Comparator ←
4) Comparable
5) Iterable → iterator()

Consumer<T>

↓

void accept(T t)

↓

This method can do some operation on a parameter and return nothing

BiConsumer<T, U>

↓

void accept(T, U)

Predicate<T>

↓

boolean test(T t)

Similarly → BiPredicate

Callable

Function < T, U >

U apply (T t)

BiFunction <T, U, V>

V apply (T t, U, u